

Before the
Federal Communications Commission
Washington, D.C. 20554

In the Matter of
Application of
EchoStar Communications Corporation, (a Nevada Corporation), General Motors Corporation, and Hughes Electronics Corporation (Delaware Corporations)
(Transferors)
and
EchoStar Communications Corporation (a Delaware Corporation)
(Transferee)
CS Docket No. 01-348

HEARING DESIGNATION ORDER

Adopted: October 9, 2002

Released: October 18, 2002

By the Commission: Chairman Powell and Commissioners Abernathy and Copps issuing separate statements; Commissioner Martin approving in part, concurring in part, dissenting in part, and issuing a statement.

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I. INTRODUCTION

1. In this Order, we consider the application (the “Application”)¹ of EchoStar Communications Corporation (“EchoStar”), General Motors Corporation (“GM”), and Hughes Electronics Corporation (“Hughes”) (collectively, the “Applicants”) for consent to transfer control of various Commission authorizations, including direct broadcast satellite (“DBS”)² and fixed satellite space station authorizations, earth station authorizations, and other related authorizations held by their wholly- or majority-owned subsidiaries to EchoStar Communications Corporation (“New EchoStar”). The proposed transaction involves the split-off of Hughes from GM, followed by the merger of the Hughes and EchoStar companies. The proposed merged entity, New EchoStar, would have a new ownership structure and would continue to provide DBS subscription television service under the DirecTV brand name. If approved, the proposed merger would combine operations of the two major DBS providers in the United States – EchoStar and DirecTV Holdings, LLC (“DirecTV”), a wholly-owned subsidiary of Hughes,³ into one single entity. In addition to acquiring the significant DBS operations of EchoStar and DirecTV, New EchoStar would acquire other significant satellite operations of Hughes, including Hughes Network

¹ See *Consolidated Application of EchoStar Communications Corporation, General Motors Corporation, Hughes Electronics Corporation, Transferors, and EchoStar Communications Corporation, Transferee, for Authority to Transfer Control*, December 3, 2001 (“December 2001 Filing”); *Letters to William F. Caton, Acting Secretary, Federal Communications Commission from Pantelis Michalopoulos, Counsel for EchoStar and Gary Epstein, Counsel for Hughes providing information pursuant to Section 1.65 of Commission Rules*, filed December 18, 2001 and February 21, 2002 (“December 2001 Amendment Letter” and “February 2002 Amendment Letter”). The term, “Application,” includes the *December 2001 Filing, December 2001 Amendment Letter, and February 2002 Amendment Letter*. The Commission placed the Applicants’ filing on public notice December 21, 2001, DA 01-3005, CS Docket No. 01-348, establishing a comment cycle for this proceeding. See Appendix A for a list of parties filing in this proceeding and the abbreviations by which they are identified herein.

² DBS is the acronym used in the United States to describe the domestic implementation of the satellite service known internationally as the broadcasting satellite service (“BSS”).

³ The Commission granted *pro forma* transfer of control applications to Hughes’ DBS licensees, DirecTV Enterprises, LLC and USSB II, Inc., authorizing the transfer of control to DirecTV Holdings, LLC, a wholly-owned subsidiary of Hughes. The *pro forma* transfers of control were part of an internal corporate reorganization by Hughes for tax and other business considerations and did not affect the ultimate ownership of the licensees, which remain indirect, wholly-owned subsidiaries of Hughes. See *Letters from Jennifer Gilsenan, Chief, Policy Branch, Satellite Division to James H. Barker, counsel for Hughes Electronics Corporation*, dated August 19, 2002, File No. SAT-T/C-20020618-00091 and File No. SAT-T/C-20020618-00092.

Services, Inc. (“HNS”), a leading facilities-based provider of very small aperture terminal (“VSAT”) network systems, and PanAmSat Corporation (“PanAmSat”), a leading global facilities-based provider of geostationary-satellite orbit (“GSO”) fixed satellite services (“FSS”).⁴

2. We also consider the joint application submitted by EchoStar and Hughes requesting authority to launch and operate NEW ECHOSTAR 1, a direct broadcast satellite that would be located at the 110° W.L. orbital location (the “Satellite Application”).⁵ In the Satellite Application, EchoStar and Hughes propose, subject to and contingent upon grant of the Application, to launch and operate a spot beam satellite with other existing and planned satellites at the 110° W.L. orbital location on frequencies currently authorized to EchoStar and DirecTV.⁶ The Applicants claim that grant of the proposed Satellite Application would ultimately allow New EchoStar to offer local broadcast channels in all 210 U.S. Designated Market Areas (“DMAs”).⁷

3. Based on the record before us, we find that Applicants have not met their burden of demonstrating that approval of the Application is in the public interest. As discussed more fully below, we are concerned that ownership of all satellites in the full-CONUS orbital locations by one entity, New EchoStar, could likely undermine our goals of increased and fair competition in the provision of DBS service. We are also concerned that the claimed benefits of efficient and expeditious use of spectrum are outweighed by the potential harms associated with the concentration of ownership of key DBS spectrum licenses in a single licensee. Further, we are not convinced that such concentration of ownership of the DBS spectrum licenses would result in more effective competition in the multichannel video programming distribution (“MVPD”) market or that the combined spectrum resources of the Applicants are necessary for deployment of viable satellite-delivered broadband services. Accordingly, pursuant to Section 309(e) of the Communications Act of 1934, as amended (the “Communications Act” or the

⁴ The Applicants also state that EchoStar has agreed to purchase Hughes’ interest in PanAmSat in the event the proposed transfer of Hughes and EchoStar to New EchoStar is terminated under certain circumstances. See Application at 2, and Application Vol. II, Tab 4 (*PanAmSat Stock Purchase Agreement*). Although the Application includes a description of the *PanAmSat Stock Purchase Agreement* and although it was referred to in the public notice relating to the entire transaction, the Applicants did not request, nor did the Commission specifically notice or seek comment on, a separate, stand alone transaction to transfer control of Hughes’ interest in PanAmSat to EchoStar. See 47 U.S.C. §§ 308, 309 and 310. Thus, we do not consider as part of this proceeding, the separate transfer of control of Hughes’ interest in PanAmSat to EchoStar.

⁵ *EchoStar Satellite Corporation and Hughes Electronic Corporation, Application for Authority to Launch and Operate NEW ECHOSTAR 1 (USABBS-16)*, S2435, File No. SAT-LOA-20020225-00023 (Feb. 25, 2002) (“February 2002 Application”); *Letter to William F. Caton, Acting Secretary, Federal Communications Commission from Pantelis Michalopoulos, Counsel for EchoStar, and Gary Epstein, Counsel for Hughes, providing supplemental Technical Annex* (Mar. 28, 2002) (“March 2002 Technical Annex”); and *Letter to Marlene H. Dortch, Secretary, Federal Communications Commission from Pantelis Michalopoulos, Counsel for EchoStar, and Gary Epstein, Counsel for Hughes, providing complete copy of supplemental Technical Annex* (May 30, 2002) (“May 2002 Technical Annex”). The term, the “Satellite Application,” includes the *February 2002 Application*, *March 2002 Technical Annex*, and *May 2002 Technical Annex*. The Commission placed the Applicants’ joint filing on public notice April 19, 2002, CS Docket No. 01-348, DA 01-922 (“*Satellite Application Public Notice*”), and established an additional comment cycle in this proceeding. Parties filing in response to this public notice are listed in Appendix A.

⁶ In the *Satellite Application Public Notice*, we noted that the Satellite Application, *inter alia*, related to merger-specific effects, and thus, expanded our review of the Application to include consideration of the Applicants’ Satellite Application. See *Satellite Application Public Notice* at 3.

⁷ DMAs are used by Nielsen Media Research to identify TV stations whose broadcast signals reach a specific area. A DMA consists of all counties whose largest viewing share is given to stations of that same market area. Non-overlapping DMAs cover the entire contiguous 48 states, and also, Hawaii and parts of Alaska. There are currently 210 DMAs throughout the United States. See <http://www.nielsenmedia.com/FAQ/index.html>.

“Act”), we hereby designate the Application for hearing. In addition to the specific issues we designate for hearing, we also direct that the review of Applicants’ proposed Satellite Application be undertaken within the context of the hearing proceeding.

II. DESCRIPTION OF THE PARTIES

A. EchoStar Communications Corporation

4. EchoStar is a publicly traded company incorporated in Nevada and headquartered in Littleton, Colorado.⁸ EchoStar currently has three classes of issued and outstanding shares: Class A common, Class B common, and Series D convertible preferred stock.⁹ All of the outstanding shares of Class B common stock are held of record by a trust controlled by Charles W. Ergen, EchoStar’s Chairman and Chief Executive Officer, and all the Series D convertible preferred shares are held by a wholly-owned subsidiary of Vivendi Universal, S.A., (“Vivendi”),¹⁰ a French media, communications, and environmental services company with its principal office in Paris, France.¹¹ The Class A common stock is held by approximately 6,000 shareholders including institutional and private investors. There are two shareholders that currently own or control ten percent or more of EchoStar shares – Charles Ergen, who holds a 44.8% equity and an 89.0% voting interest, and Vivendi, which holds a 10.7% equity and a 2.2% voting interest.¹²

5. EchoStar’s core business, the delivery of DBS service, is offered to consumers through two interrelated business units: the Digital Sky Highway (DISH) Network, which provides service in the United States, and EchoStar Technologies Corporation, which is engaged in the design, development, distribution and sale of EchoStar receiver systems.¹³ EchoStar, with more than seven million customers

⁸ See EchoStar Communications Corp., Securities and Exchange Commission (“SEC”) Form 10-K, Annual Report for the fiscal year ended December 31, 2001 (“*EchoStar 10-K 2001 Annual Report*”).

⁹ *EchoStar 10-K 2001 Annual Report* at 5, 36.

¹⁰ *Id.* On January 22, 2002, EchoStar issued 5,760,479 shares of Series D convertible preferred stock valued at approximately \$260.40 per share, in exchange for a \$1.5 billion equity investment by Vivendi. See *EchoStar 10-K Annual Report* at 5, and EchoStar Communications Company, SEC 8-K Filing, January 23, 2002 (“*EchoStar 8K January 2002 Filing*”). The Series D convertible preferred stock is convertible, at any time, into 10 shares of EchoStar Class A common stock, at the option of the holder, and will automatically convert under certain conditions. See EchoStar Communications Corporation, Amendment No. 1 to Schedule 14C, filed May 29, 2002 (“*EchoStar May 29, 2002 Preliminary Information Statement*”) at 291.

¹¹ In December 2001, EchoStar and Vivendi announced an eight-year strategic alliance in which Vivendi will develop and provide EchoStar DISH Network with a variety of programming and interactive television services. EchoStar and Vivendi also announced their intention to work on a programming initiative to develop new non-exclusive satellite-delivered broadband channels featuring interactive games, movies, sports, education, and music. Further, as part of the alliance, EchoStar will integrate Vivendi’s advanced, interactive middleware technology, MediaHighway, a Canal+ Technology, as a non-exclusive middleware solution that will provide DISH Network customers using personal video recorders unique interactive television services, such as movies from Vivendi, and music from Universal Music Group. See SEC Form 10-Q, Quarterly Report for the period ending March 31, 2002 (“*EchoStar 10-Q March 2002 Report*”) at 34.

¹² See *February 2002 Amendment Letter* at Attachment D.

¹³ *EchoStar 10-K 2001 Annual Report* at 2.

nationwide,¹⁴ offers its DISH Network customers multichannel video and audio programming, and also provides limited interactive and two-way high-speed Internet access services.¹⁵

6. EchoStar, through its wholly-owned direct and indirect subsidiaries, holds several Commission DBS authorizations to operate in orbital locations that are capable of serving customers in all contiguous 48 states (*i.e.*, the continental United States or "CONUS").¹⁶ At the 119° W.L. location, EchoStar is authorized to operate 21 frequencies¹⁷ and at the 110° W.L. location, 29 frequencies.¹⁸ In the

¹⁴ According to recent SEC filings, as of June 30, 2002, EchoStar has 7.46 million subscribers. *See* EchoStar Communications Company, SEC Form 10-Q, Quarterly Report for the period ending June 30, 2002 ("*EchoStar 10-Q June 2002 Report*") at 18.

¹⁵ *See e.g.*, Application at 10. According to EchoStar, its DBS satellites enable it to offer over 500 video and audio channels, together with limited data services and high definition and interactive TV services. *EchoStar 10-K 2001 Annual Report* at 5. EchoStar offers limited interactive digital receivers with programming storage capacity that permits customers to pause and record live programs. In addition, EchoStar offers set-top boxes capable of providing interactive television services and applications. *Id.* at 9. EchoStar also offers customers two-way, high-speed satellite Internet access along with its DISH Network satellite television programming – initially through an alliance with StarBand Communications, Inc. ("StarBand"); *see n.27, infra*. More recently, in connection with alliances with SBC Communications Corp. and EarthLink Communications, Inc. *See EchoStar, Earthlink Announce Strategic Marketing Alliance; EchoStar to Offer DISH Network Customers Bundled DSL Internet Service, Digital Satellite Television* (press release), April 19, 2002 at http://www.corporate-ir.net/ireye/ir_site.zhtml?ticker=dish&script=410&layout=-6&item_id=281421. *See also SBC, EchoStar Announce Strategic Marketing Alliance* (press release), April 17, 2002 at http://www.corporate-ir.net/ireye/ir_site.zhtml?ticker=dish&script=410&layout=-6&item_id=286371.

¹⁶ The United States has been allocated eight DBS orbital locations by the International Telecommunication Union ("ITU"). The eight U.S. orbital positions, proceeding from west to east (all West Longitude), are 175°, 166°, 157°, 148°, 119°, 110°, 101°, and 61.5°. *See* Appendix 30 to the ITU Radio Regulations. Three of these eight locations, 101° W.L., 110° W.L., and 119° W.L., are full-CONUS orbital locations, capable of serving customers across the contiguous 48 states, and also Hawaii and Alaska. *See Revision of Rules and Policies for the Direct Broadcast Satellite Service*, 11 FCC Rcd 9712, 9762 (1995) ("*1995 DBS Report and Order*"); *Policies and Rules for the Direct Broadcast Satellite Service* 17 FCC Rcd 11311, 11340 (2002), ("*2002 DBS Report and Order*"). The spectrum allotted for DBS service at each of the eight CONUS orbital locations can support 32 analog channels (or transponders) with 24 MHz of usable bandwidth per transponder. Thus, a total of 96 analog channels, each with a 24 MHz bandwidth, are capable of providing service from the three U.S. allocated full-CONUS locations. Recent advances in digital compression have enabled expansion of analog channels to multiple digital channels, with compression ratios of at least 10 to 1, based on technology predominately used today, and higher. *See infra*, ¶ 66. For instance, certain DirecTV satellites are capable of providing a total of 328 digital channels (9 clear and 319 encoded) per 32 analog channels. *See 2002 DBS Order, supra*. To better reflect the expanded capacity now available from each DBS orbital location, throughout this Order, we use the term "frequencies" instead of "channels" or "transponders."

¹⁷ *See EchoStar Satellite Corporation For Assignment of Direct Broadcast Satellite Orbital Positions and Channels*, 7 FCC Rcd 1765 (Int'l Bur. 1992); *Letter from Donald H. Gipps, Chief, International Bureau, Federal Communications Commission to EchoStar Satellite Corporation*, 11 FCC Rcd 16468 (Int'l Bur. 1996); *Letter from Donald H. Gipps, Chief, International Bureau, Federal Communications Commission, to DirectSat Corporation*, 11 FCC Rcd 16465 (Int'l Bur. 1996); *EchoStar Satellite Corporation, et. al, Application for Authority to Make Minor Modifications to Direct Broadcast Satellite Authorizations, Launch, and Operational Authority*, 13 FCC Rcd 8595 (Int'l Bur. 1998) ("*1998 EchoStar Minor Mod.*"); *EchoStar Satellite Corporation Application for Authority to Make Minor Modifications to Direct Broadcast Satellite Authorizations, Launch, and Operation Authority*, 15 FCC Rcd 23636 (Int'l Bur. 2000) ("*2000 EchoStar Minor Mod.*").

¹⁸ *See Application of MCI Telecommunications Corporation, and EchoStar 110 Corporation for Consent to Assignment of Authorization to Construct, Launch, and Operate a Direct Broadcast Satellite System Using 28 Channels at the 110°W.L. Orbital Location*, 16 FCC Rcd 21608 (Int'l Bur. 1999) ("*MCI-EchoStar Order*"); *EchoStar Satellite Corporation Application for Modification to Direct Broadcast Satellite Authorization and for Operation Authority*, 15 FCC Rcd 6727 (Int'l Bur. 1999) ("*1999 EchoStar Mod.*").

western CONUS DBS orbital locations, which are capable of providing service to the Western United States, EchoStar holds authorization to operate 24 frequencies at the 148° W.L.¹⁹ and in the eastern DBS orbital location, which is capable of providing service to the Eastern and Central United States, EchoStar holds authorization to operate 11 frequencies at 61.5° W.L.²⁰ In addition, at the 61.5° W.L. location, EchoStar holds a Special Temporary Authority to operate 13 frequencies, and also subleases six frequencies from Dominion Video Satellite, Inc.²¹

7. EchoStar also holds Commission authority to launch and operate a Ku-band FSS system at the 83° W.L. and 121° W.L. orbital locations,²² and has controlling interest in VisionStar Corporation, which holds authorization to launch and operate a Ka-band satellite at the 113° W.L. orbital location.²³ In addition, EchoStar has submitted an application to the Commission for authority to launch and operate a global satellite system to operate in the extended Ku-band.²⁴

8. In conjunction with its satellite operations, EchoStar holds authorizations for numerous transmit/receive and receive-only earth stations which are licensed to transmit and receive frequencies in the C, Ku and DBS bands.²⁵ EchoStar also wholly-owns Kelly Broadcasting Systems, Inc., which holds

¹⁹ See *Application of EchoStar DBS Corporation For Authority to Construct Launch and Operate a Direct Broadcast Satellite System at 148° W.L.*, 12 FCC Rcd 11946 (Int'l Bur. 1996); 1998 *EchoStar Minor Mod.*; 2000 *EchoStar Minor Mod.*

²⁰ See *Application of Direct Broadcasting Satellite Corporation for Assignment of Direct Broadcast Satellite Orbital Positions and Channels*, 8 FCC Rcd 7959 (Int'l Bur. 1993).

²¹ At this orbital location, EchoStar holds authorizations for 11 frequencies, R/L DBS Company, LLC ("R/L DBS") holds authorizations for 11 frequencies, and Dominion Video Satellite, Inc. ("Dominion") holds authorizations for 8 frequencies; the remaining 2 frequencies are unassigned. The International Bureau granted Special Temporary Authority to EchoStar to operate over all frequencies at this location, see *Direct Broadcasting Satellite Corporation Application for Special Temporary Authority to Operate a Direct Broadcast Satellite over Channels 1-21 (odd) and 23-32 (odd and even) at 61.5 W.L.*, 13 FCC 6392 (Int'l Bur. 1998); *Direct Broadcasting Satellite Corporation Application Authority of a Direct Broadcast Satellite, Application for Modification and Request for Special Temporary Authority to Test*, 13 FCC Rcd 10080 (Int'l Bur. 1998). See also *Dominion Video Satellite, Inc.*, 14 FCC Rcd 8182 (Int'l Bur. 1999); *Petition of R/L DBS Company, L.L.C. For Extension of its Direct Broadcast Satellite Construction Permit*, 16 FCC Rcd 9 (Int'l Bur. 2000) ("*R/L DBS Petition*"). R/L DBS is not yet using its assigned frequencies to provide service and Dominion uses two of its frequencies for its religious programming and subleases six of its frequencies to EchoStar.

²² See *Application of EchoStar Satellite Corporation for Authority to Construct, Launch and Operate Space Stations in the Domestic Fixed-Satellite Service*, 11 FCC Rcd 20446 (Int'l Bur. 1996). EchoStar failed to meet the milestone requirement for this authorization, and its request for extension of milestone dates is pending.

²³ See *Application of VisionStar, Inc., Licensee, Shant Hovnanian, Transferor and EchoStar VisionStar Corporation, Transferee*, 16 FCC Rcd 19187 (Int'l Bur. 2001). On April 30, 2002, VisionStar filed a Request for Extension of Time to Complete Construction and to Launch Fixed Satellite Service, which is currently pending. EchoStar also received Ka-band authorizations at the 83° W.L. and 121° W.L. orbital locations, see *EchoStar Satellite Corporation Application for Authority to Construct, Launch and Operate a Ka-Band Satellite System in the Fixed-Satellite Service*, 13 FCC Rcd 5664 (Int'l Bur. 1997), however, the International Bureau canceled these authorizations for failure to satisfy the initial mandatory implementation milestone, see *EchoStar Satellite Corporation, Application for Authority to Construct, Launch, and Operate a Ka-band Satellite System in the Fixed-Satellite Service*, 17 FCC Rcd 12780 (Int'l Bur. 2002). EchoStar's petition for reconsideration is pending before the Commission.

²⁴ EchoStar KuX Corporation, a direct wholly-owned subsidiary of EchoStar, has submitted an application for use of extended Ku-band frequencies. See *Application For Authorization to Launch and Operate Satellites in the Extended Ku-Band*, Public Notice, File Nos. 82/83-SAT-P/LA-96 and 84-SAT-P-96, (Mar. 20, 1996).

²⁵ See Application, Attachment C; see also Appendix B.

authorizations for seven transmit/receive earth stations that operate in the C and Ku-bands, and four transmit-only earth stations that operate in the C-band.²⁶

9. EchoStar has ownership interests in other satellite service providers as well. EchoStar holds an approximately 32% interest in StarBand Communications, Inc., (“StarBand”) which offers two-way, high-speed Internet access service.²⁷ It also holds an approximately 20% interest in WildBlue Communications, Inc., which has plans to offer high-speed Internet service from Ka-band satellites,²⁸ and Celsat America, Inc., which has plans to provide service in the 2 GHz Mobile-Satellite Service (“MSS”) band.²⁹

B. General Motors and Hughes Electronics Corporation

10. GM is a publicly traded company incorporated in Delaware and headquartered in Detroit, Michigan.³⁰ GM is engaged in the automotive and, through its wholly-owned Hughes subsidiary, the telecommunications industries.³¹ Hughes’ telecommunications operations are comprised of three business segments: Direct-To-Home Broadcast, Network Systems, and Satellite Systems.³² GM currently has

²⁶ See Public Notices, Satellite Communications Services Information, Actions Taken, Report No. SES-00383, April 8, 2002 and Report No. SES-00387, April 24, 2002.

²⁷ See Application at 11. In April 2002, EchoStar terminated its wholesale distribution agreement with StarBand, and in June 2002, surrendered its voting interest in StarBand, but continues to retain its equity holdings in StarBand. See <http://dc.internet.com/news/article.php/1369411>(visited June 27, 2002). See *EchoStar SEC 10-Q March 2002 Report* at 7.

²⁸ See Application at 11. WildBlue Communications is the parent company of WB Holdings 1 LLC, which holds Commission authorizations for 500 MHz of Ka-band spectrum at the 73° W.L. and 109.2° W.L. orbital locations, and KaStarCom. World Satellite, LLC., which holds Commission authorizations for 500 MHz of Ka-band spectrum at the 73° W.L. and 109.2° W.L. orbital locations and 1000 MHz at the 111° W.L. orbital location. See, *Assignment of Orbital Locations to Space Stations in the Ka-Band*, Order, 13 FCC Rcd 1030 (Int’l Bur. 1997) (“*First Round Assignment Order*”), revised, *Assignment of Orbital Locations to Space Stations in the Ka-Band*, Order, 12 FCC Rcd 22004 (Int’l Bur. 1997) (“*First Round Reassignment Order*”); *Second Round Assignment of Geostationary Satellite Orbit Locations to Fixed-Satellite Service Space Stations in the Ka-Band*, 16 FCC 14389 (Int’l Bur. 2001) (“*Second Round Assignment Order*”), revised, *Second Round Assignment of Geostationary Satellite Orbit Locations to Fixed Satellite Service Space Stations in the Ka-Band*, 17 FCC Rcd 14400 (“Int’l Bur. 2002) (“*Second Round Reassignment Order*”) (“*Ka-Band Assignment Orders*”).

²⁹ EchoStar holds 17.6% interest in Celsat America, Inc., which holds Commission authorization to construct and launch a two-satellite GSO mobile-satellite system to serve the United States using service links in the 2 GHz MSS band. *Celsat America, Inc.*, Order and Authorization, 16 FCC Rcd. 13712 (2001). The Commission authorized Celsat to operate its MSS system’s feeder links using 500 MHz of uplink spectrum in the Ka-band at the 121° W.L. and 83° W.L. orbital locations. *Celsat America, Inc.*, Order and Authorization, 16 FCC Rcd. 14278 (2001).

³⁰ See General Motors, Inc. SEC Form 10-K, Annual Report for the fiscal year ended December 31, 2001 (*GM 10-K 2001 Annual Report*).

³¹ *GM 10-K 2001 Annual Report* at I-1. GM also has financial and insurance operations and, to a lesser extent, is engaged in other industries. See also Hughes Electronics Corporation, SEC Form 10-K, Annual Report for the fiscal year ended December 31, 2001 (*Hughes 10-K 2001 Annual Report*).

³² The three business segments are differentiated by their products and services: the Direct-To-Home Broadcast segment is engaged in acquiring, promoting, selling and/or distributing digital entertainment programming via satellite to residential and commercial customers and providing land-based DSL services; the Satellite Services segment is engaged in the selling, leasing and operating of satellite transponders and providing services for cable television systems, news companies, Internet service providers and private business networks; and the Network Systems segment is a provider of satellite-based private business networks and broadband Internet access, and a supplier of DirecTV receiving equipment (set-top boxes and dishes). See Hughes Electronics Corporation, SEC Form 10-Q, Quarterly Report for the period ending June 30, 2002 (*Hughes 10-Q March 2002 Report*) at 21.

issued and outstanding shares of GM \$1 2/3 par value common stock and Class H common stock or “Hughes Tracking Stock.”³³ The Hughes Tracking Stock is a publicly-traded tracking stock designed to provide holders with financial returns based only on the financial performance of GM’s wholly-owned Hughes subsidiary, and not on the financial performance of the whole of GM.³⁴ Currently, two shareholders own ten percent or more of GM stock – State Street Bank and Trust Company, a Massachusetts corporation, acting as trustee for various trusts and employee benefit plans, which beneficially owns 14% of GM’s \$1 2/3 par value common stock, and U.S. Trust Corporation, a New York corporation, which beneficially owns approximately 20% of the Hughes Tracking Stock.³⁵

11. Hughes’ Direct-To-Home Broadcast business segment consists of the operations of DirecTV Holdings, LLC (“DirecTV”) in the United States,³⁶ DirecTV Latin America, LLC in Latin America and the Caribbean Basin,³⁷ and DirecTV Broadband, Inc. (formerly Telocity Delaware, Inc.).³⁸ Through its wholly-owned subsidiaries, DirecTV holds DBS authorizations to operate 32 frequencies at the 101° W.L. orbital location, three frequencies at the 110° W.L. orbital location,³⁹ and, 11 frequencies at the 119° W.L. orbital location.⁴⁰ Through its wholly-owned subsidiaries, DirecTV also holds authorizations for numerous transmit/receive, receive-only, and transmit-only earth stations which are licensed to transmit and/or receive frequencies in the C, Ku, and DBS-bands.⁴¹ In the United States, DirecTV provides DBS service consisting of multichannel video and audio digital entertainment channels to more than 10 million subscribers,⁴² including subscribers who receive DirecTV services from members of the National Rural Telecommunications Cooperative (“NRTC”) pursuant to a contract between

³³ GM also had issued and outstanding 2.7 million shares of GM Series H 6.25% automatically convertible preference stock. Application at Vol.1, Tab E. On June 24, 2002, the 2.7 million shares of GM Series H 6.25% automatically convertible preference stock held by America Online, Inc., a wholly owned subsidiary of AOL Time Warner Inc., converted into 80 million shares of GM Class H common stock (*i.e.*, Hughes Tracking Stock) as provided for in the terms of the Series H stock. GM originally issued the GM Series H preference shares to AOL in connection with a strategic alliance between AOL and Hughes Electronics Corp. in 1999. As a result of the conversion, GM no longer has any shares of preference stock outstanding (*see* Hughes Electronics Corporation, SEC Form 8-K, filed June 24, 2002) and AOL Time Warner Inc. now holds 8.4% of the Hughes Tracking Stock. *See* GM SEC Form 13-G, filed June 24, 2002 at 3.

³⁴ Holders of Hughes Tracking Stock have no direct rights in the equity of assets of Hughes, but rather have rights in the equity and assets of GM. *See GM 10-K 2001 Annual Report*, cover page.

³⁵ Application at Vol.1, Tab E.

³⁶ The Commission recently approved *pro forma* transfer of control applications that resulted in the transfer of numerous holdings of various Hughes companies into DirecTV Holdings, LLC. *see* n.3, *supra*.

³⁷ The Applicants state that DirecTV Latin America LLC, which is licensed by a foreign country, is not part of this Application. *See* Application at n.30.

³⁸ *See Hughes 10-K 2001 Annual Report* at 3. On April 3, 2001, Hughes acquired Telocity Delaware, Inc. (“Telocity”), a company that provides land-based digital subscriber line (“DSL”) services. Telocity is now operating as DirecTV Broadband. *Id.* at 41. *See also Hughes 10-Q June 2002 Report* at 20.

³⁹ *See United States Satellite Broadcasting Co., Inc. and DirecTV Enterprises, Inc.*, 14 FCC Rcd 4585 (Int’l Bur. 1999) (“USSB-DirecTV Order”); *Hughes Communications Galaxy, Inc.*, 99 FCC 2d 1369, 1371, 1387, 1388 (1984).

⁴⁰ *See Tempo Satellite Inc. and DirecTV Enterprises, Inc.*, 14 FCC Rcd 7946 (Int’l Bur. 1999) (“Tempo-DirecTV Order”); *see also DirecTV Enterprises, Inc.*, 7 FCC Rcd 2728 (Int’l Bur. 1992) and 7 FCC Rcd 6597 (Int’l Bur. 1992).

⁴¹ *See* Application, Attachment C.

⁴² According to recent SEC filings, DirecTV has 10.7 million subscribers, 1.7 million of whom are customers of NRTC. *See* Hughes Electronics Corporation, SEC Form 10-Q, Quarterly Report for the period ending June 30, 2002 (“Hughes 10-Q June 2002 Report”) at 38.

DirecTV and the NRTC.⁴³ DirecTV Broadband, Inc. offers terrestrial high-speed DSL service, which it purchases from wholesale providers, to customers across the country where digital subscriber line technology (“DSL”) is available.⁴⁴

12. Hughes’ Network Systems business segment includes the operations of HNS.⁴⁵ HNS holds a number of authorizations for transmit/receive earth stations and VSAT networks for use of frequencies in the C and Ku-bands.⁴⁶ Through leased Ku-band satellite transponders, HNS offers broadband satellite services to private business networks, and offers two-way high-speed, satellite-based Internet access service to consumers under the DirecPC and DirecWay brands.⁴⁷ HNS also manufactures subscriber equipment for DirecTV satellite television receivers and set-top boxes.⁴⁸ HNS holds Commission authorization for the construction, launch and operation of a Ka-band satellite system, the SPACEWAY Satellite System, which consists of satellites assigned to eight orbital locations at 101° W.L., 99° W.L., 49° W.L., 54° E.L., 101° E.L., 111° E.L., 164° E.L., and 25° E.L.⁴⁹ In addition, HNS holds Ka-band authorizations at the 131° W.L., 30° E.L., 7.5° W.L., and 103° E.L. orbital locations.⁵⁰

13. Hughes’ Satellite Services business segment consists primarily of the operations of PanAmSat, a publicly traded corporation of which Hughes owns approximately 81%.⁵¹ PanAmSat holds Commission authorizations to operate FSS systems using the C and Ku-bands and currently owns and operates a satellite fleet of 21 satellites.⁵² PanAmSat leases transponder capacity on its satellites and delivers entertainment and information to cable television systems, television broadcast affiliates, direct-to-home television operators, Internet service providers, telecommunications companies and other corporations.⁵³ PanAmSat’s largest customers are its affiliates, HNS, DirecTV Latin America, and

⁴³ In 1994, NRTC and Hughes Communications Galaxy, Inc. (DirecTV’s predecessor-in-interest) entered into a Distribution Agreement wherein NRTC received exclusive program distribution rights to market DirecTV’s DBS service in rural areas of the United States. NRTC, its members and affiliates currently distribute DirecTV to approximately 1.9 million rural households. NRTC’s largest affiliate, Pegasus Communications Corporation, distributes DirecTV programming to approximately 1.5 million of NRTC’s customers. *See* NRTC Comments at 3.

⁴⁴ *See* Application at 14; Hughes 10-K 2001 Annual Report at 26. *See also* “Hughes Successfully Completes Acquisition of Telocity; Offers First Nationwide Portfolio of Digital Entertainment and Internet Access Via DSL and Satellite” (press release), April 3, 2001 at http://www.directvbroadband.net/press/releases/2001_04_03.asp. *See also* “Telocity Adopts ‘DIRECTV DSL’ as New Service Name; DSL Division of HUGHES (NYSE: GMH) Incorporates Well Known DIRECTV Brand into Service and Company Name (press release), June 12, 2001 http://www.directvbroadband.net/press/releases/2001_06_12.asp.

⁴⁵ *See* Application at 14; Hughes 10-K 2001 Annual Report at 3.

⁴⁶ *See* Application, Attachment C.

⁴⁷ *See* Hughes 10-K 2001 Annual Report at 3. *See also* Application, Attachment C.

⁴⁸ *See* Hughes 10-K 2001 Annual Report at 3.

⁴⁹ *See* Hughes Communications Galaxy, Inc. Application for Authority to Construct, Launch, and Operate a Ka-band Satellite System in the Fixed-Satellite Service, 16 FCC Rcd 2470 (Int’l Bur. 2001).

⁵⁰ *See* Ka-Band Assignment Orders, n.28, *supra*.

⁵¹ The remaining stock in PanAmSat is held approximately 10% by the original founders and approximately 9% is publicly traded. *See* <http://www.panamsat.com/company/invester.asp> (visited Sept. 23, 2002).

⁵² *See* PanAmSat 10-K 2001 Annual Report at 12.

⁵³ PanAmSat’s customers for video services include AOL Time Warner (e.g., HBO, CNN); the BBC, News Corp (Fox family of channels), Sony, Viacom, Walt Disney Company (e.g. ABC, ESPN); its customers for direct-to-home services include DirecTV-Latin America, MultiChoice (Africa), Sky Mexico, Sky Latin America, Sky Brazil, Television and Radio Broadcasting Services (Asia and Australia); and its customers for network services include HNS, Telstra and WorldCom. *See* PanAmSat 10-K 2001 Annual Report at 8.

DirecTV.⁵⁴ PanAmSat holds Commission authority to launch and operate Ka-band satellites at 13 orbital locations: 103° W.L., 36° E.L., 40° E.L., 48° E.L., 124.5° E.L., 149° E.L., 173° E.L., 133° W.L., 58° W.L., 45° W.L., 68.5° E.L., 72.7° E.L., 166° E.L.⁵⁵ In addition, PanAmSat holds authorizations for numerous earth stations which are licensed to transmit and receive frequencies in the C and Ku-bands, and also holds Section 214 authorizations for telecommunications services.⁵⁶

C. THE PROPOSED TRANSACTION

14. The transaction proposed by EchoStar and Hughes, and set forth in various interrelated agreements,⁵⁷ involves two principal components: the GM/Hughes separation transactions⁵⁸ and the Hughes/EchoStar merger.⁵⁹ These transactions, some of which require GM stockholder approval in order for the proposed merger to take place, are described in more detail below.⁶⁰

1. GM/Hughes Separation Transactions

15. The proposed GM/Hughes separation transactions are designed to prepare Hughes to complete the proposed merger with EchoStar by separating the Hughes business from GM by means of a split-off. The GM/Hughes separation transactions consist of two parts – the Hughes recapitalization, which will result in the creation of HEC Holdings,⁶¹ and the HEC Holdings split-off.

16. Under the proposed Hughes recapitalization, Hughes will distribute a dividend of up to \$4.2 billion to GM and GM's retained economic interest in Hughes will be reduced by an amount that reflects the dividend.⁶² Upon receipt of the \$4.2 billion dividend, GM will contribute all of the

⁵⁴ See *PanAmSat 10-K 2001 Annual Report* at 3.

⁵⁵ See *PanAmSat Corporation, Application for Authority to Construct, Launch, and Operate a Ka-band Satellite System in the Fixed-Satellite Service*, Order and Authorization, 16 FCC Rcd 2490 (Int'l Bur. 2001). Hughes assigned a portion of its Ka-band authorization, comprising seven orbital locations to PanAmSat. See *Assignment of Orbital Locations to Space Stations in the Ka-Band*, 13 FCC Rcd 1030 (Int'l Bur. 1997) and 12 FCC Rcd 22004 (Int'l Bur. 1997)(reassigning PanAmSat's satellite at 67° W.L. to the 103° W.L. orbit location). See also *Ka-Band Assignment Orders*, n.28, *supra*.

⁵⁶ See Application, Volume IV.

⁵⁷ See *Id.* Volume II, Tabs 1-4. The principal transaction agreements include the *Merger Agreement* (Tab 1); the *Implementation Agreement* (Tab 2); the *Separation Agreement* (Tab 3); the *PanAmSat Stock Purchase Agreement* (Tab 4); and certain other ancillary agreements contemplated by the agreements listed above.

⁵⁸ See *Id.* Volume II, Tab 3, *Separation Agreement*.

⁵⁹ See *Id.* Volume II, Tab 1, *Merger Agreement*.

⁶⁰ The proposed merger has already been approved by the stockholders of EchoStar, however, approval by GM common stockholders for certain aspects of the proposed transactions are still required. If the GM \$1 2/3 par value common stockholders and GM Class H (Hughes Tracking Stock) common stockholders, each voting separately as a class and voting together as a single class based on their respective per share voting power, do not approve the GM/Hughes separation transactions (recapitalization and split-off), Hughes will remain a wholly owned subsidiary of GM and neither the GM/Hughes separation transactions nor the Hughes/EchoStar merger will occur. See *Amendment No. 2 to Schedule 14-A (GM Preliminary Proxy Statement)*(July 11, 2002).

⁶¹ See Application, Tab 2, *Implementation Agreement*. Pursuant to the terms of the *Implementation Agreement*, GM and Hughes may elect to internally reorganize by inserting a holding company above Hughes and below GM. See *Id.* at § 5.1(l). GM and Hughes have implemented such a reorganization so that a new company, HEC Holdings, Inc., incorporated in Delaware ("HEC Holdings"), is now the immediate parent of Hughes and a wholly owned subsidiary of GM. See *GM Preliminary Proxy Statement*.

⁶² Separation Agreement at 5; Application at 17.

outstanding stock of Hughes to HEC Holdings, Inc., a newly formed subsidiary created for purposes of the proposed merger transaction. As a result, HEC Holdings will become the parent company of Hughes. In exchange for the contribution of Hughes' stock to HEC Holdings, which at that point will consist of all the outstanding Hughes Tracking Stock, GM will receive HEC Holdings Class C common stock and thus, will hold all of the issued shares of HEC Holdings.⁶³

17. To accomplish the split-off of the Hughes business from GM, GM will distribute to each stockholder of Hughes Tracking Stock, one share of HEC Holdings Class C common stock in redemption of and in exchange for each share of Hughes Tracking Stock.⁶⁴ Thus, holders of Hughes Tracking Stock will become holders of HEC Holdings Class C common stock.⁶⁵ As a result of this exchange, all outstanding shares of Hughes Tracking Stock will be redeemed and cancelled.⁶⁶ In this way, HEC Holdings would be split-off from GM and would become an independent, publicly owned company, which would own the entire Hughes business.⁶⁷

2. Hughes/EchoStar Merger

18. Following the recapitalization and split-off, Hughes and EchoStar propose to combine their businesses pursuant to a merger of HEC Holdings and EchoStar.⁶⁸ While HEC Holdings would be the surviving corporation, the merged entity would be renamed EchoStar Communications Corporation and incorporated in Delaware ("New EchoStar").⁶⁹ New EchoStar proposes to issue three classes of common stock, New EchoStar Class A, Class B, and Class C common stock.⁷⁰ Holders of EchoStar Class A common stock would receive 1.3699 shares of New EchoStar Class A common stock in exchange for each share of EchoStar Class A common stock; holders of EchoStar Class B common stock would receive 1.3699 shares of New EchoStar Class B common stock in exchange for each share of EchoStar Class B

⁶³ The amount of the dividend from Hughes and the number of shares of HEC Holdings Class C common stock that GM will receive in the transactions cannot be definitively determined until the time of the completion of the separation transactions because each will depend upon certain factors that will not be known until that time. See EchoStar Communications Corporation, Amendment No. 3 to Schedule 14-C, (August 12, 2002) at 2, 19, 83, 220-222. See *GM Preliminary Proxy Statement* at 2.

⁶⁴ See Application at 17.

⁶⁵ GM may achieve additional liquidity with respect to a portion of its retained economic interest in Hughes and thus, may receive shares of HEC Holdings Class C common stock as part of the GM distribution of HEC Holdings Class C common stock. See General Motors Corp., SEC Form 10-Q, for period ending June 30, 2002 (*GM June 2002 10-Q*) at 25.

⁶⁶ Following the redemption of the Hughes Tracking Stock, GM intends to amend and restate its Certificate of Incorporation to eliminate such class of stock. See *Implementation Agreement* §§ 1.4(b)(iv), 1.5(d), 1.8, 1.13. As a result of these transactions, GM will have only one class of common stock, GM \$1 2/3 par value common stock.

⁶⁷ A majority of holders of the outstanding shares of GM \$1-2/3 Common Stock and Hughes Tracking Stock must approve the recapitalization and split-off. See *Implementation Agreement* § 1.2. In addition, the parties would not agree to complete the proposed merger unless the Hughes split-off would be tax-free to GM and its stockholders for federal income tax purposes. See *May 29, 2002 Preliminary Information Statement* at 85. On July 11, 2002, GM received a favorable ruling from the Internal Revenue Service confirming that the merger of its Hughes subsidiary with EchoStar would be tax free to GM and its shareholders for U.S. federal income-tax purposes. See General Motors Corporation, SEC Form 10-Q, Quarterly Report for the period ending June 30, 2002, ("*GM 10-Q June 2002 Report*") at 25.

⁶⁸ See Application at 18.

⁶⁹ See *Id.* at 2.

⁷⁰ *Merger Agreement* § 2.1(d)-(e).

common stock;⁷¹ and the holders of HEC Holdings Class C common stock distributed in the GM/Hughes separation transactions would have their shares reclassified as New EchoStar Class C common stock.⁷² Except as to voting rights, the New EchoStar Class A and C common stock would be identical.⁷³

19. It is anticipated that the New EchoStar board of directors would initially consist of 11 members, eight of whom are current directors and/or officers of EchoStar⁷⁴ and three of whom are currently directors and/or officers of Hughes.⁷⁵ For the three years following the merger, at least six of the members of the New EchoStar board of directors would be “independent” directors as determined under the New EchoStar certificate of incorporation and bylaws.⁷⁶ Charles W. Ergen, the current Chairman and Chief Executive Officer of EchoStar, would be the Chairman and Chief Executive Officer of New EchoStar⁷⁷ and David K. Moskowitz, the current Senior Vice President, General Counsel and Secretary of EchoStar would continue as the Senior Vice President, General Counsel and Secretary of New EchoStar.⁷⁸ The other officers of New EchoStar would be determined by a management transition committee prior to the completion of the merger.⁷⁹

3. Scope of the Proposed Transaction

20. The proposed transaction would bring the various Commission authorizations and licenses held by EchoStar and Hughes, including the full-CONUS DBS authorizations now held separately by EchoStar and DirecTV, under control of one new entity, New EchoStar. Approval of the proposed transaction would combine the two largest providers of DBS service into a single provider of

⁷¹ See *EchoStar May 29, 2002 Preliminary Information Statement* at 85.

⁷² The EchoStar Series D convertible preferred stock held by Vivendi is automatically convertible into 10 shares of EchoStar Class A common stock immediately prior to the effectiveness of the merger. Post-merger, Vivendi will hold less than 5% of the equity and about 1% of the voting interests in New EchoStar. See *December 2001 Amendment* at 2. Vivendi also has contingent value rights as downside protection for the price of the Class A common stock to be issued upon conversion of the Series D Preferred Stock. The maximum payment under the rights is \$225 million if the merger with Hughes is completed, or \$525 million if the merger is not completed. See *Contingent Value Rights Agreement between EchoStar Communications Corporation and Vivendi Universal, S.A. (Dec. 14, 2001)*. See also *EchoStar May 29, 2002 Preliminary Information Statement* at 291.

⁷³ See *EchoStar May 29, 2002 Preliminary Information Statement* at 85. The New EchoStar B common stock would have special voting rights, would be convertible into New EchoStar Class A or C common stock, and would be subject to certain transfer restrictions. However, in all respects other than voting rights, convertibility, and transfer restrictions, the New EchoStar Class B common stock would be substantially the same as the New EchoStar Class A and B common stock.

⁷⁴ The eight directors and/or officers of EchoStar who would serve as directors of New EchoStar are O. Nolan Daines, Peter A. Dea, James DeFranco, Michael T. Dugan, Charles E. Ergen, Jean-Marie Messier, David K. Moskowitz, and Steven B. Schaver. See *Amendment No. 3 to Schedule 14C, August 12, 2002, filed by EchoStar, at 292-293*.

⁷⁵ The three directors and/or officers of Hughes who would serve as directors of New EchoStar are Peter A. Lund, Harry J. Pearce, and Jack A. Shaw. See *Amendment No. 3 to Schedule 14C, August 12, 2002, filed by EchoStar, at 292-293*.

⁷⁶ *Id.*

⁷⁷ See *Application* at 15.

⁷⁸ See *Amendment No. 3 to Schedule 14C, August 12, 2002, filed by EchoStar, at 294*.

⁷⁹ *Id.*

DBS service in the United States, which would serve over 18 million subscribers.⁸⁰ Moreover, the merged entity would hold authorizations for all of the current U.S. DBS frequencies at the full-CONUS orbital locations.⁸¹ The proposed merger would also include the transfer of Ka-band authorizations held by EchoStar, Hughes, and its subsidiary PanAmSat, to New EchoStar,⁸² as well as PanAmSat's GSO FSS C and Ku-band operations, and the authorizations held by HNS, one of PanAmSat's largest customers.⁸³ A list of FCC authorizations and licenses held by each of the Applicants that are subject to transfer under the proposed transaction are provided in Appendices B, C, and D of this Order.⁸⁴

21. In addition, the Applicants have proposed, subject to and contingent upon approval of the proposed merger, to launch and operate a DBS spot beam satellite in order to provide additional local broadcast channel programming capacity.⁸⁵ Specifically, EchoStar and Hughes filed their conditional joint Satellite Application seeking approval to launch and operate NEW ECHOSTAR 1 at the 110° W.L. orbital location with other existing and planned satellites in that orbital location currently authorized to EchoStar and DirecTV.⁸⁶ Through the reuse of eight of the thirty-two DBS frequencies at 110° W.L., the Applicants propose to form 28 distinct spot beams to provide delivery of local broadcast channels to DMAs not previously served by either EchoStar or DirecTV.⁸⁷ The Applicants claim that the NEW ECHOSTAR 1 satellite, when combined and integrated with the other satellite and spectrum assets of New EchoStar, would enable New EchoStar to provide access to local broadcast programming in all 210 DMAs in the United States, including Alaska and Hawaii.⁸⁸

⁸⁰ According to recent SEC filings, as of June 30, 2002, EchoStar has 7.46 million subscribers (*see EchoStar 10-Q June 2002 Report* at 18) and DirecTV has 10.7 million subscribers (*see Hughes 10-Q June 2002 Report* at 38. *See* n. 14, 43, *supra*).

⁸¹ As a result of consolidation in the DBS industry since the Commission first began authorizing use of the DBS spectrum, EchoStar and Hughes, through its DirecTV subsidiary, have emerged as the two dominant providers of DBS service in the United States. Combined, EchoStar and DirecTV hold Commission authorizations to operate from all three full-CONUS orbital locations using all 96 frequencies allotted to these locations for full-CONUS DBS service.

⁸² *See PanAmSat 10-K 2001 Annual Report* at 1-2. PanAmSat, which is 81% owned by Hughes, provides video and data network service to major broadcasting companies, DTH providers, and telecommunications companies. PanAmSat also provides satellite services directly to network suppliers for development and operation of private business networks in the United States.

⁸³ *See PanAmSat 10-K 2001 Annual Report* at 8.

⁸⁴ Appendix B lists the FCC authorizations and licenses held by EchoStar. Appendix C and D lists the FCC authorizations and holdings of Hughes, with Appendix D listing separately the authorizations and licenses held by PanAmSat.

⁸⁵ We found that the issues raised and the claims made by the Applicants in the Satellite Application were directly relevant to the issues under consideration in our review and evaluation of the proposed merger Application. Thus, we treated the Satellite Application as a major amendment to the Applicants' proposed transaction and sought comment from interested parties on the proposed Satellite Application in this proceeding. *See* n.5, *supra*.

⁸⁶ *See Satellite Application* at 3-4. The Applicants state that the proposed Satellite Application is conditioned upon approval of the proposed merger transaction. *Id.* at 5.

⁸⁷ *Id.* at 21. The Applicants propose to use five DBS frequencies that currently are licensed to EchoStar and three DBS frequencies that are currently licensed to DirecTV. *Id.* at 8.

⁸⁸ The Applicants claim that approval of the Satellite Application will allow the merged entity to vigorously compete with incumbent cable operators as New EchoStar would be in a position to offer a complete substitute to incumbent cable system video offerings, and thus, in this regard, truly implement Congress' vision under Satellite Home Viewers Improvement Act of 1999, 47 U.S.C. § 338 ("SHVIA").

4. Claimed Benefits of the Proposed Transaction and Joint Satellite Application

22. The Applicants claim that numerous public interest benefits would result from approval of the proposed merger transaction and the Satellite Application. They contend that one of the most important benefits of the proposed merger will be the elimination of what they characterize as “a major restraint” on the ability of DBS operators to compete with cable systems in the MVPD market. That restraint, according to the Applicants, is their duplicative use of DBS spectrum to provide “overlapping programming services.”⁸⁹ The Applicants claim that EchoStar and DirecTV currently deliver over 500 identical channels of programming and that elimination of this duplication would promote the Commission’s long-standing policy in favor of efficient and non-duplicative use of the spectrum.⁹⁰ This in turn, they contend, would provide concrete benefits to consumers as New EchoStar would be able to use the increase in available DBS capacity to offer significantly more local-into-local programming and to expand its offerings of high-definition television (“HDTV”) programming, pay-per-view (“PPV”), video-on-demand (“VOD”) and other niche programming, as well as interactive services, such as interactive television (“ITV”) and broadband satellite Internet services.⁹¹ The Applicants also claim that approval of the Satellite Application would enable New EchoStar to provide consumers with access to local broadcast channels in all 210 DMAs in the United States (“local-into-local programming”), thus implementing Congress’s goal of broad-based local television service by satellite, as reflected in SHVIA.⁹²

23. The Applicants claim that the merger would have no anti-competitive effects in the relevant market, which they claim is the multichannel video programming distributor (“MVPD”) market,⁹³ but rather would have significant pro-competitive effects as New EchoStar would be better able to compete with other MVPD providers, particularly cable operators, by offering new and expanded programming choices to consumers. This in turn would ultimately result in improved products, prices and overall quality to consumers.⁹⁴ The Applicants also claim that their commitment to price DBS service on a uniform nationwide basis will provide benefits to customers in both urban and rural areas since competition in the most densely populated and heavily contested areas will require that New EchoStar set the national price low enough to compete for new subscribers in these urban areas, consequently providing competitive prices to customers in rural areas.⁹⁵

24. The Applicants additionally claim that the proposed merger would allow New EchoStar to provide “true” broadband Internet access service to all regions of the country.⁹⁶ The Applicants claim that the combined Ka-band authorizations held by EchoStar, Hughes, and PanAmSat, along with the FSS resources of PanAmSat, would enable New EchoStar to proceed timely with efforts to deploy satellite broadband Internet services nationwide, and thus, more effectively compete with cable’s bundled offering

⁸⁹ See Application at 3-4, 27; Satellite Application at 3, 7-8. Applicants claim that this spectrum inefficiency “has become a potentially debilitating competitive impediment for DBS providers due to a combination of factors, including the imposition of satellite mandatory carriage obligations, the advent of digital cable services, and the new bandwidth that “going digital” gives to cable operators.” *Id.* at 4.

⁹⁰ See Application at 25; Satellite Application at 1, 7.

⁹¹ See Application at 27-35.

⁹² See Satellite Application at 4.

⁹³ 47 U.S.C. § 602(13).

⁹⁴ In addition, the Applicants claim that the increase of available spectrum would provide more diversity in the provision of independent programming voices. See Application at 34-35.

⁹⁵ See Applicants’ Reply Comments at vi.

⁹⁶ See Application at 25.

of high-speed Internet access and MVPD products and telephone companies' DSL offerings.⁹⁷ The Applicants contend that the creation of New EchoStar would resolve the inefficiencies and uncertainties that would exist if each company separately were to offer broadband services, and would dramatically maximize the timely introduction of nationwide competition in the broadband markets, including rural and underserved areas.⁹⁸ In addition, the Applicants claim that all consumers would benefit from vigorous competition between New EchoStar and cable systems in urban areas as lower prices resulting from "intermodal" broadband competition in these areas would also benefit rural and underserved users with lower prices.⁹⁹ Thus, the Applicants conclude that due to spectrum efficiencies, cost savings and revenue synergies,¹⁰⁰ the proposed merger would produce tangible benefits for all Americans, and request that the Commission grant approval of the Application.

III. STANDARD OF REVIEW AND PUBLIC INTEREST FRAMEWORK

25. Pursuant to sections 214(a) and 310(d) of the Act, the Commission must determine whether the Applicants have demonstrated that the proposed transfer of control of Hughes' and EchoStar's licenses and authorizations will serve the public interest, convenience and necessity.¹⁰¹ In making this determination, we first assess whether the proposed transaction complies with the specific provisions of the Act,¹⁰² other applicable statutes, and the Commission's rules. The public interest standards of sections 214(a) and 310(d) involve a balancing process that weighs the potential public interest harms of the proposed transactions against the potential public interest benefits.¹⁰³ The Applicants bear the burden of proving, by a preponderance of the evidence, that the proposed transaction, on balance, serves the public interest.¹⁰⁴ If we are unable to find that the proposed transaction serves the public interest for any reason, or if the record presents a substantial and material question of fact, Section 309(e) of the Act requires that we designate the application for hearing.¹⁰⁵

⁹⁷ See *Id.* 6-8, 47-49

⁹⁸ See *Id.* at 6-8, 47. According to the Applicants, the deployment of broadband satellite systems by each company alone would face significant obstacles as such systems are highly capital-intensive requiring a critical mass of broadband subscribers to achieve an offering that combines a competitive price and a reasonably short time to market. See *Id.* 7, 47.

⁹⁹ See *Id.* at 47.

¹⁰⁰ See *Id.* at 36. The Applicants contend that New EchoStar would achieve cost savings that include reduced subscriber acquisition costs, reduced customer turnover, or churn, improved signal security as a result of moving to a standardized DBS platform, reduced programming costs as a result of a larger subscriber base, and elimination of duplicative overhead.

¹⁰¹ 47 U.S.C. §§ 214(a), 310(d).

¹⁰² Section 310(d) requires that we consider the applications as if the proposed transferee were applying for the licenses directly under section 308 of the Act. 47 U.S.C. § 310(d). Thus, we must examine New EchoStar's qualifications to hold licenses. See 47 U.S.C. § 308.

¹⁰³ See, e.g., *Applications of VoiceStream Wireless Corp., Powertel, Inc. and Deutsche Telekom AG*, 16 FCC Rcd 9779, 9789 (2001); *AT&T Corp., British Telecommunications, plc, VLT Co. L.L.C., Violet License Co. LLC, and TNV [Bahamas] Limited Applications For Grant of Section 214 Authority, Modification of Authorizations and Assignment of Licenses in Connection with the Proposed Joint Venture Between AT&T Corp. and British Telecommunications, plc*, 14 FCC Rcd 19410 (1999).

¹⁰⁴ See, e.g., *Applications for Consent to the Transfer of Control of Licenses and Section 214 Authorizations from Telecommunications, Inc., Transferor to AT&T Corp., Transferee*, 14 FCC Rcd 3160, 3168-70 (1999) ("AT&T-TCI Order").

¹⁰⁵ 47 U.S.C. § 309(e). Section 309(e)'s requirement applies only to those applications to which Title III of the Act applies, *i.e.*, radio station licenses. We are not required to designate for hearing applications for the transfer or

(continued...)

26. Our public interest evaluation necessarily encompasses the “broad aims of the Communications Act,”¹⁰⁶ which includes, among other things, preserving and enhancing competition in relevant markets, ensuring that a diversity of voices is made available to the public, and accelerating private sector deployment of advanced services.¹⁰⁷ The Supreme Court has repeatedly emphasized the Commission’s duty and authority under the Communications Act to promote diversity and competition among media voices: It has long been a basic tenet of national communications policy that “the widest possible dissemination of information from diverse and antagonistic sources is essential to the welfare of the public.”¹⁰⁸ Our public interest analysis may also entail assessing whether the merger will affect the quality of communications services or will result in the provision of new or additional services to consumers.¹⁰⁹ In conducting this analysis, the Commission may consider technological and market changes, and the nature, complexity, and speed of change of, as well as trends within, the communications industry.¹¹⁰

27. In determining the competitive effects of the merger, our analysis is not limited by traditional antitrust principles.¹¹¹ The Commission and the Department of Justice (“DOJ”) each have independent authority to examine communications mergers, but the standards governing the Commission’s review differ from those of DOJ.¹¹² DOJ reviews mergers pursuant to Section 7 of the Clayton Act, which prohibits mergers that are likely to substantially lessen competition in any line of commerce.¹¹³ The Commission, on the other hand, as stated above, is charged with determining whether the transfer of licenses serves the broader public interest. In the communications and video programming industries, competition is shaped not only by antitrust rules, but also by the regulatory policies that govern the interactions of industry players.¹¹⁴ In addition to considering whether the merger will reduce existing competition, therefore, we also must focus on whether the merger will accelerate the decline of market power by dominant firms in the relevant communications markets.¹¹⁵ We also recognize that the same consequences of a proposed merger that are beneficial in one sense may be harmful in another. For instance, combining assets may allow the merged entity to reduce transaction costs and offer new

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assignment of Title II authorizations when we are unable to find that the public interest would be served by granting the applications, *see ITT World Communications, Inc. v. FCC*, 595 F.2d 897, 901 (2d Cir. 1979), but of course may do so if we find that a hearing would be in the public interest.

¹⁰⁶ *Applications for Consent to the Transfer of Control of Licenses and Section 214 Authorizations from MediaOne Group, Inc., Transferor, to AT&T Corp., Transferee*, 15 FCC Rcd 9816, 9821 (2000) (“*AT&T-MediaOne Order*”); *AT&T-TCI Order*, 14 FCC Rcd at 3168-69.

¹⁰⁷ *See* 47 U.S.C. §§ 157 nt, 254, 332(c)(7), Telecommunications Act of 1996, Preamble; *AT&T-MediaOne Order*, 15 FCC Rcd at 9821; *cf.* 47 U.S.C. §§ 521(4), 532(a).

¹⁰⁸ *Turner Broadcasting System, Inc. v. FCC*, 512 U.S. 622, 663 (1994) (quoting *United States v. Midwest Video Corp.*, 406 U.S. 649, 668 n.27 (1972)).

¹⁰⁹ *AT&T-MediaOne Order*, 15 FCC Rcd at 9821.

¹¹⁰ *Id.*

¹¹¹ *See Satellite Business Systems*, 62 F.C.C.2d 997, 1088 (1977) *aff’d sub nom United States v. FCC*, 652 F.2d 72 (DC Cir., 1980) (*en banc*); *Northern Utilities Service Co. v. FERC*, 993 F.2d 937, 947-48 (1st Cir. 1993) (public interest standard does not require agencies “to analyze proposed mergers under the same standards that the Department of Justice . . . must apply”).

¹¹² *AT&T-TCI Order*, 14 FCC Rcd at 3168-69.

¹¹³ 15 U.S.C. § 18.

¹¹⁴ *AT&T-MediaOne Order*, 15 FCC Rcd at 9821.

¹¹⁵ *Id.*

products, but it may also create market power, create or enhance barriers to entry by potential competitors, and create opportunities to disadvantage rivals in anticompetitive ways.¹¹⁶

IV. COMPLIANCE WITH COMMUNICATIONS ACT AND COMMISSION RULES AND POLICIES

A. Licensing Qualifications

28. Section 310(d) of the Communications Act provides that no station license may be transferred, assigned, or disposed of in any manner except upon a finding by the Commission that the “public interest, convenience and necessity will be served thereby.”¹¹⁷ Among the factors that the Commission considers in its public interest inquiry is whether the applicant for a license has the requisite “citizenship, character, financial, technical, and other qualifications.”¹¹⁸ The Commission has previously determined that, in deciding character issues, it will consider certain forms of adjudicated, non-FCC related misconduct that includes: (1) felony convictions; (2) fraudulent misrepresentations to governmental units; and (3) violations of antitrust or other laws protecting competition.¹¹⁹ With respect to FCC related conduct, the Commission has stated that violations of provisions of the Act, or of the Commission's rules or policies have a bearing on an applicant's character qualifications.¹²⁰ The Commission has used its character policy in the broadcast area as guidance in resolving similar questions in transfer of common carrier authorizations and other license transfer proceedings.¹²¹

29. A number of Opponents raise concerns about EchoStar's past conduct in FCC proceedings and question whether it is qualified to be the “sole DBS gatekeeper.”¹²² In addition, several Opponents have alleged that EchoStar has failed to adhere to its must-carry obligations. Specifically, they claim that EchoStar, from at least 1998, offered local-into-local stations absent agreement to do so, as a distributor for PrimeTime 24, a satellite carrier, in violation of the Satellite Home Viewer Act of 1994 (“SHVA”), 17

¹¹⁶ See, e.g., *Applications for Consent to the Transfer of Control of Licenses and Section 214 Authorizations by Time Warner, Inc. and American Online, Inc. Transferee*, 16 FCC Rcd 6547, 6553 (2001) (“AOL-Time Warner Order”); *Bell Atlantic-NYNEX Order*.

¹¹⁷ 47 U.S.C. § 310(d).

¹¹⁸ See *Applications for Consent to the Transfer of Control of Licenses and Section 214 Authorizations from Southern New England Telecommunications Corporation, Transferor to SBC Communications, Inc., Transferee*, 13 FCC Rcd 21292, 21305 (1998) (“SBC-SNET Order”).

¹¹⁹ *Policy Regarding Character Qualifications in Broadcast Licensing*, 102 FCC 2d 1179, 1209-10 (1986) (“*Character Qualifications Policy Statement*”), modified, 5 FCC Rcd 3252 (1990), recon. granted in part, 6 FCC Rcd 3448 (1991), modified in part, 7 FCC Rcd 6564 (1992) (collectively “*Broadcast Licensing Character Qualifications*”).

¹²⁰ *Character Qualifications Policy Statement*, 102 FCC 2d at 1208-9.

¹²¹ See *Broadcast Licensing Character Qualifications supra*; *MCI Telecommunications Corp.*, 3 FCC Rcd 509, 515 n.14 (1988) (stating that character qualifications standards adopted in the broadcast context can provide guidance in the common carrier context).

¹²² Univision, Petition at 12-14; CWA Petition at 2-5; Northpoint Technology Petition at 12-14. The Opponents cite instances where (i) the Commission described EchoStar's argument to delay carriage of public interest programming as “disingenuous,” *Petition for Waiver of DBS Public Interest Implementation*, 15 FCC Rcd 1814, 1817 (1999); (ii) the Cable Bureau admonished EchoStar for failure to timely disclose that information it was treating as confidential had been publicly disclosed, thus failing in its “duty of candor” to the agency, *EchoStar Satellite Corp. v. Young Broadcasting*, 16 FCC Rcd 15070 (Cable Bur. 2001); and (iii) the International Bureau justified imposing EchoStar the maximum allowable fine for operating satellites from unauthorized orbital positions based on “the degree of misconduct, lack of voluntary disclosure and continuing violation.” *EchoStar Satellite Corp.*, 13 FCC Rcd 16510 (Int'l Bur. 1998).

U.S.C. § 119.¹²³ In a 1998 lawsuit against PrimeTime 24, a United States district court found that PrimeTime had “simply ignored” the Commission’s standard for retransmission and enjoined PrimeTime’s retransmission of certain stations.¹²⁴ Although PrimeTime 24 came into compliance with the court order, EchoStar and DirecTV simply terminated their contracts with PrimeTime 24 and allegedly continued to distribute local broadcast stations, claiming that they were not bound by the injunction.¹²⁵ DirecTV eventually came into compliance.¹²⁶ Paxson, however, alleges that EchoStar continues to provide illegal network signals.”¹²⁷

30. Numerous merger Opponents and other commenters claim that EchoStar evaded its must-carry obligations under Satellite Home Viewer Improvement Act of 1999 (“SHVIA”)¹²⁸ by delaying or refusing carriage on frivolous grounds, responding to carriage requests with form letters, or by demanding stations to make unreasonable demonstrations of their signal quality before carrying them.¹²⁹ EchoStar also placed certain local programming on non-CONUS satellites, requiring customers who wish to receive such programming to obtain additional equipment.¹³⁰ The Media Bureau addressed the matter, rejecting EchoStar’s argument that its two-dish approach complied with SHVIA and the Commission’s rules.¹³¹

¹²³ See also Paxson Petition at 7 (citing 17 U.S.C. §§ 119, 325(b), and 47 C.F.R. § 76.64); Primetime 24 Comments at 7-9.

¹²⁴ *CBS, Inc. v. PrimeTime 24 Joint Venture*, 9 F. Supp.2d 1333, 1344 (S.D. Fla. 1998) (“PrimeTime 24 has simply ignored the grade B test. . . . This evidence demonstrates that PrimeTime 24 knew of the governing legal standard, but nevertheless chose to circumvent it. Accordingly, the Magistrate Judge correctly rejected PrimeTime 24’s protests of ‘good faith.’”).

¹²⁵ PrimeTime 24 Comments at 8-9.

¹²⁶ *CBS Broadcasting Inc. v. DirecTV*, No. 99-565-CIV-Nesbitt, 2000 WL 426396 (S.D.N.Y. Feb. 25, 1999).

¹²⁷ Paxson Petition at 8.

¹²⁸ 47 U.S.C. § 338.

¹²⁹ Family Petition at 2-3 (complaining that EchoStar disregarded its must-carry obligations by denial of carriage to local and public broadcasters); Johnson Petition at 3-4 (alleging that EchoStar’s discriminatory implementation of its must-carry obligations); Telecasting Comments at 4-5 (EchoStar displays conduct that reflects a pattern of evading its carriage obligation, contravening SHVIA and the Commission’s regulations by denying or impeding the rights of broadcasters to have their programming carried); Univision Petition at 8 (EchoStar “cherry-pick[s]” the local service and often refused to carry Spanish-language stations); Paxson Reply Comments at 8 (expressing concern about EchoStar’s compliance with must-carry obligations); NPIT Reply Comments at 1-2 (same); Satellite Receivers Reply Comments at 3 (same). The Commission criticized EchoStar’s carriage policy of requiring broadcasters “to prove signals.” See *Implementation of the Satellite Home Viewer Improvement Act of 1999: Broadcast Signal Carriage Issues*, 16 FCC Rcd 16544, 16572 (2001).

¹³⁰ Brunson Petition at 4-8 (complaining that EchoStar’s two-dish policy violates must-carry obligations); Carolina Petition at 5-4 (EchoStar places a vast majority of independent and niche stations on a second satellite, for which a second, uninstalled dish is needed for reception by customers); Eagle Petition at 4-8 (complaining that EchoStar’s two-dish policy violates must-carry obligations); Johnson Petition at 3-4 (complaining that EchoStar has failed in its must-carry obligations and its two-dish policy unreasonably burdens carriage of local broadcasters); Pappas Comments at 11 (EchoStar relegated broadcasters to “wing slot” satellites that require special dishes to receive such stations and deterred customers from having the extra dish installed.); Paxson Petition at 6-7, 12-13 (EchoStar has openly defied its obligations to carry qualified television signals by refusing must carry demands on indefensible grounds and using two-dishes); Univision Petition at 9-16 (EchoStar has used secondary non-CONUS satellites that require an additional dish to transmit disfavored channels, including most Spanish language programming).

¹³¹ See *National Association of Broadcasters and Association of Local Television Stations; Request for Modification or Clarification of Broadcast Carriage Rules for Satellite Carriers*, 17 FCC Rcd 6065 (Med. Bur. 2002) (“*Second Dish Order*”). Four Petitions for Reconsideration of that decision are pending. See Joint Petition for Partial Reconsideration or Clarification filed by Hardy, Carey & Chautin, LLP, LeSea Broadcasting Corp., Christina Television, Inc., and Carolina Christian Broadcasting (Apr. 18, 2002), Petition for Partial Reconsideration filed by

(continued...)

The Media Bureau required EchoStar to remedy the unlawful discrimination identified in the *Second Dish Order* as expeditiously as possible and also required the operator to file Compliance Reports on a periodic basis that describe both its plan and complete actions to bring its carriage of broadcast stations into compliance.¹³² EchoStar has filed the requested Compliance Plans and its efforts are currently subject to evaluation in terms of the operator's present state of compliance with SHVIA and the Commission's must-carry rules.¹³³

31. In addition, CWA alleges that the DISH Network "has refused to engage in serious collective bargaining" and raises other labor law concerns.¹³⁴ Finally, Pegasus alleges that EchoStar employees and/or its agents have used "false and misleading statements" about the proposed merger to deceive Pegasus subscribers into believing that they must switch to the Dish Network at this time.¹³⁵

32. In response, the Applicants describe the foregoing issues as "private grievances" relating to "contractual or regulatory disputes, and the alleged quality of customer service."¹³⁶ They maintain that the merger opponents have failed to demonstrate that this merger proceeding is the appropriate forum for resolving such issues.¹³⁷ Instead, Applicants point out that the proceedings that deal with these matters provide the appropriate forum for such complaints.

33. We conclude that none of the foregoing allegations provides a sufficient basis for finding that EchoStar lacks the fitness to acquire the licenses and authorizations currently held by Hughes/DirecTV. While certain past behavior by EchoStar has raised concern, we do not find such a pattern of conduct that would seriously erode our ability to trust EchoStar as a Commission licensee.¹³⁸ None of the matters cited by the Opponents has led to a finding that EchoStar fails to have the requisite "citizenship, character, financial, technical or other qualifications" to be a licensee. In addition, none of

(...continued from previous page)

Brunson Communications Inc. (May 3, 2002), Petition for Clarification or Partial Reconsideration filed by Maranatha Broadcasting Company, Inc. (May 6, 2002), and Petition for Reconsideration, filed by EchoStar Satellite Communications (May 6, 2002). In addition, three Applications for Review of the Bureau's decision by the full Commission are pending. See Applications for Review filed by WLNY-TV Inc. and Golden Orange Broadcasting Co. (May 3, 2002), Association of Public Television Stations and the Public Broadcasting Service (May 6, 2002), and Paxson Communications Corporation (May 6, 2002).

¹³² *Second Dish Order*, 17 FCC Rcd at 6081.

¹³³ The question of whether EchoStar is presently in violation of SHVIA and the Commission's rules is subject to decision by the full Commission in the pending applications for review. See n.17, *supra*. The Commission will address the issue in that proceeding rather than in the instant Order. If the Commission determines on review that EchoStar is not in compliance with the statute or its rules, appropriate action will be taken.

¹³⁴ CWA Petition at 4.

¹³⁵ See Letters from Patrick J. Grant, Counsel for Pegasus, to Marlene H. Dortch, Secretary, Federal Communications Commission (Aug. 27, 2002, Sept. 6, 2002, and Sept. 24, 2002) (providing examples of such practices and related correspondence between Pegasus and EchoStar). See also Letter from David R. Goodfriend, Director, Legal and Business Affairs, EchoStar (Sept. 12, 2002) (stating that EchoStar is investigating these allegations and that Pegasus is attempting to involve the Commission in a private commercial dispute).

¹³⁶ Applicants' Reply Comments at 146.

¹³⁷ *Id.* at 147.

¹³⁸ Compare, e.g., *Applications of Leslie D. Brewer*, 17 FCC Rcd 2804, 2804 (2002) (licensee lacked character qualifications because he "had been broadcasting without a license . . . and was marketing and selling unauthorized FM broadcast transmitting equipment"); *Kevin David Mitnick*, 16 FCC Rcd 22740, 22740 (2002) (license applicant was "a convicted felon whose illegal activities have included the interception of electronic communications, computer fraud, wire fraud, and causing damage to computers"); *Mario Loreda*, 11 FCC Rcd 18010, 18010 (1996) (permit applicant misrepresented nationality).

the allegations raised in this proceeding, whether considered singly or as a whole, provides a basis for finding that EchoStar lacks the fitness and requisite character to hold or acquire licenses and authorizations. Our processes remain available for rule violations that aggrieved parties may wish to raise in the future, and the Applicants may be subject to further enforcement actions, including forfeitures arising from any failure to comply with the statute or our rules. Outstanding allegations regarding rule violations are best handled in proceedings arising under the affected rule or policy because, in such proceedings, the Commission would have a complete record to review the relevant facts.¹³⁹ Similarly, unadjudicated non-FCC violations, like those alleged by CWA, should be resolved by the governmental agency with proper jurisdiction.¹⁴⁰

34. We recognize that some of the points raised by Opponents with respect to EchoStar's qualifications may be pertinent to our evaluation of the potential harms and benefits of the proposed transaction. For example, Applicants have made certain claims regarding prospective public interest benefits from the merger, including the provision of local-into-local broadcast television service in all 210 markets, the ability to bring "true" broadband services to rural areas, as well as promises to remedy the merger's potential anticompetitive effects in areas not served by cable competitors with a "national pricing plan" that extends to both MVPD and broadband services. Applicants have also asserted that the swap-out of set-top boxes necessary for all current DBS subscribers to receive the combined service of the merged entity will be free of charge to subscribers.

35. Realization of these claimed benefits, as well as the effective operation of the proffered national pricing "remedy," depends in large part on the likelihood that EchoStar has correctly predicted how New EchoStar will implement certain business strategies. EchoStar's record with respect to compliance with SHVIA's must-carry provisions and our rules suggests a resistance to taking steps to serve the public interest that do not also serve the company's view of its own private economic interest. Moreover, one of the prime subjects of the alleged prior misconduct lies at the heart of the realization of the proffered public interest benefits claimed to flow from the merger – provision of additional local- into-local service pursuant to the must-carry rules. Accordingly, this history of past conduct will be taken into account in assessing the likelihood that potential beneficial conduct will occur in the absence of private economic incentives.

36. In summary, we find no reason on this record to conclude that Applicants' behavior to date precludes our find that the Applicant possesses the requisite "citizenship, character, financial, technical or other qualifications" to be a licensee. Accordingly we do not refer this issue to hearing.

B. Impact of the Transaction on Diversity

1. Background

37. As stated above, the Commission's public interest evaluation includes an evaluation of the proposed merger's affect on the quality and diversity of communications services to consumers.¹⁴¹ In

¹³⁹ See *Applications of Ameritech Corp., Transferor, and SBC Communications Inc., Transferee, for Consent to Transfer Control of Corporations Holding Commission Licenses and Lines Pursuant to Section 214 and 310(d) of the Communications Act of Parts 5, 22, 24, 25, 63, 90, 95 and 101* 14 FCC Rcd 14712, 14949-50 (1999) ("SBC-Ameritech Order"), (quoting *SBC-SNET Order*, 13 FCC Rcd at 21306). In addition, Commission precedent often requires past FCC rule violations to be coupled with legitimate "evidence in the record to contravene the Applicants'" assertions that they are currently running their businesses in a "responsible matter" in order to raise a real character issue. See *SBC-SNET Order*, 13 FCC Rcd at 21306-07 (1998).

¹⁴⁰ See CWA Petition at 5.

¹⁴¹ See Section III, *supra*.

this respect, various parties have raised issues concerning the proposed merger's impact on program diversity, viewpoint diversity, and employment diversity. These issues are discussed below.

38. *Program diversity.* One of the Commission's goals in the area of media policy is program diversity, which refers to the availability of a variety of programming formats such as comedy, drama, and newsmagazines, as well as specific content categories such as health, business, food and content targeted to ethnic or racial groups.¹⁴² The Applicants assert that the proposed merger would increase program diversity because operational and spectrum efficiencies that would result from combining the two separate companies would permit the merged firm to add channels and thus offer more independent and diverse programming.¹⁴³ Several Members of Congress support the Applicant's position on this issue.¹⁴⁴

39. A number of parties, however, disagree that the proposed merger would promote the program diversity policies of the Commission. Consumers Union asserts that the proposed merger would reduce program diversity because it would reduce the number of DBS firms available for the Commission to "benchmark" regarding compliance with the DBS public interest set-aside obligations. Consumers Union claims that putting EchoStar, a company that has been clearly "recalcitrant" in complying with the public interest set-aside obligations, in charge of an even larger number of public interest channels, would clearly jeopardize the Commission's program diversity policies.¹⁴⁵ The National Council of LaRaza also asserts that the proposed merger would reduce program diversity and points to EchoStar's unwillingness to commit to carrying Latino-themed, English language programming post-merger.¹⁴⁶ The Congressional Hispanic Caucus ("CHC"), similarly contends that EchoStar "has not committed itself to utilize its increased programming potential to provide content that targets ... specifically 35 million Americans of Latino descent."¹⁴⁷ The CHC asserts that approval of the proposed merger would harm program diversity because New EchoStar "has not made any commitment to ensure that local Latino broadcasters ... will be carried regardless of must-carry laws."¹⁴⁸

40. Univision and The Word Network express concerns about EchoStar's prior practices and how those practices are likely to be reflected by New EchoStar, thus creating future difficulties for consumers, programmers and the Commission.¹⁴⁹ According to these parties, although both have

¹⁴² 2002 Biennial Regulatory Review – Review of the Commission's Broadcast Ownership Rules and Other Rules Adopted Pursuant to Section 202 of the Telecommunications Act of 1996, Cross-Ownership of Broadcast Stations and Newspapers, Rules and Policies Concerning Multiple Ownership of Radio Broadcast Stations in Local Markets, Definition of Radio Markets, MB Docket No. 02-277, MM Docket Nos. 01-235, 01-317, 00-244, Notice of Proposed Rulemaking ("Biennial Review NPRM") FCC 02-249 ¶ 38 (rel. Sept. 23, 2002)

¹⁴³ Applicants' Reply Comments at 124.

¹⁴⁴ Letter from the Hon. Dick Arme, Majority Leader, U.S. House of Representatives (Apr. 16, 2002); Letter from Hon. Charles F. Bass, U.S. House of Representatives, to Chairman Michael Powell, FCC (May 28, 2002); Hon. Mike Doyle, U.S. House of Representatives, to Chairman Michael Powell, FCC (July 22, 2002).

¹⁴⁵ Consumers Union Comments at 16-19.

¹⁴⁶ LaRaza Comments at 9.

¹⁴⁷ Letter from Congressional Hispanic Caucus to Chairman Michael Powell, FCC (June 6, 2002) (Letter signed by Rep. Nydia Velazquez, Rep. Jose Serrano, Rep. Grace Napolitano, Rep. Solomon Ortiz, Rep. Ed Pastor, Rep. Lucille Roybal-Allard, Rep. Robert Menendez, Rep. Ciro Rodriguez, Rep. Joe Baca, Rep. Luis Gutierrez, Rep. Charlie Gonzalez, Rep. Loretta Sanchez, Rep. Ruben Hinojosa, Rep. Anibal Acevedo-Vila, and Rep. Hilda Solis) ("CHC Letter").

¹⁴⁸ *Id.* at 2.

¹⁴⁹ Univision Petition at 12-14; Word Petition at 5-7. These parties set out various corrective actions that the Commission has taken with respect to EchoStar's practices.

obtained carriage on DirecTV, neither has been able to obtain carriage on the channels EchoStar has reserved for non-commercial educational programming.¹⁵⁰ Univision contends that approval of the proposed merger would allow one entity to exercise absolute monopoly control over the flow of programming, in particular to minority audiences, especially in areas where the minority population is insufficient to support any cable or broadcast. Univision claims that allowing one entity to exercise absolute monopoly control over the flow of programming to such vulnerable audiences would be an enormous public interest error.¹⁵¹ The Word Network contends that a merger giving one MVPD such life-or-death power over a programmer would violate the Congressional goal expressed in the 1992 Cable Act that no single operator should be so large as to be capable of dealing a “death blow” to a programmer.¹⁵²

41. Consumers Union states that if the Commission were to approve the proposed merger, the Commission must take additional actions to ensure preservation of its program diversity goals. In this respect, Consumers Union recommends that the Commission create a separate board that would select public interest programming for the public interest channels on New EchoStar. In addition, Consumers Union recommends that the Commission restructure the public interest set-aside obligations by increasing from four to seven percent the number of channels required to be set aside by New EchoStar for the carriage of public interest programming. Consumers Union also recommends that if the proposed merger is approved, the Commission require that contract terms between New EchoStar and public interest channels be reported to the Commission.¹⁵³

42. *Viewpoint diversity.* Another of the Commission’s goals in the area of media policy is viewpoint diversity. To promote this goal, the Commission has restricted ownership of media outlets in certain ways. The Commission’s rationale has been that the public would be exposed to wide variety of viewpoints if ownership of media outlets were diffused among more rather than fewer firms, a rationale that has been sustained in court.¹⁵⁴

43. The ACA and Consumers Union contend that approval of the instant license transfer application would diminish viewpoint diversity by reducing the two “voices” of EchoStar and DirecTV to one.¹⁵⁵ In addition, the ACA asserts that the combined firm would have sufficient economic power to drive many small cable operators out of business, thereby eliminating another voice in the media market.

44. *Employment diversity.* The Commission has attempted to increase minority employment in broadcasters and MVPDs through its equal employment opportunity rules.¹⁵⁶ These rules were invalidated last year by the Court of Appeals for the District of Columbia.¹⁵⁷ In response to the court’s

¹⁵⁰ Univision Petition at 5, 7-11; Word Petition at 5-6. The 1992 Cable Act requires DBS providers to allocate between four and seven percent of their channel capacity for “non-commercial programming or an educational or informational nature.” 47 U.S.C. § 335(b)(1).

¹⁵¹ Univision Petition at 16. For instance, Univision claims that geographically scattered Hispanic minority viewers have no other choice but to rely on DBS providers for access to Spanish-language programming especially in areas where broadcast or cable Spanish-language programming is not available.

¹⁵² *Id.* at 6-7.

¹⁵³ Consumers Union Comments at 16-19.

¹⁵⁴ *See, e.g., F.C.C. v. N.C.C.B.*, 436 U.S. 775 (1978) (upholding the FCC’s prohibition on the common ownership of broadcast stations and daily newspapers in the same market).

¹⁵⁵ ACA Petition at 7. Consumers Union Comments at 17-18.

¹⁵⁶ 47 C.F.R. §76.71(a).

¹⁵⁷ *MD/DC/DE Broadcasters Association v. FCC*, 236 F.3d 13 (D.C. Cir. 2001), *rehearing denied* 253 F.3d 732 (D.C. Cir. 2001), *cert. denied*, 122 S.Ct. 920 (2002).

decision, the Commission issued a Notice of Proposed Rulemaking last year proposing new EEO rules that would apply to DBS operators and other FCC-licensed media companies.¹⁵⁸ With regard to minority involvement in EchoStar, the CHC states that “EchoStar lacks sufficient minority representation and influence with no explicit practice or plan to outreach within its executive or other senior-level ranks.”¹⁵⁹

2. Discussion

45. *Program diversity.* Although the Commission has not directly addressed the impact of DBS license transfers on program diversity,¹⁶⁰ the Commission has found that, in some cases, more concentrated media market structures may promote the availability of diverse program fare than would a more diffused market structure.¹⁶¹ For instance, the Commission has found that the ownership of two broadcast television networks by a single company may increase incentives for that company to serve more diverse audiences over its combined media outlets.¹⁶² In this case, if the proposed merger were approved, Applicants have claimed that operational and spectrum efficiencies would enable New EchoStar to add channels with independent and diverse offerings.¹⁶³ The potential availability of such additional capacity, all else remaining equal, would therefore increase, not decrease, the likelihood that the merged company will offer a more diverse array of programming than either company would separately. Therefore, it is far from certain that approval of the proposed merger would, as some commenters argue, diminish program diversity.

46. We also disagree with claims that the merger would contravene Congressional intent by reducing the number of DBS operators subject to the channel set-aside for non-commercial programming. The set-aside was established for the specific purpose of “assur[ing] public access to diverse sources of information.”¹⁶⁴ Because Congress defined this obligation in percentage terms, there is no necessary connection between the number of DBS operators and the total number of channels set aside for non-commercial programming. The appropriate measure is the total number of channels operated by the universe of DBS firms. No evidence has been presented in this proceeding that the proposed merger would reduce the number of channels in use by the New EchoStar for non-commercial programming.

47. We also reject the claim by The Word Network that approval of the proposed merger would violate the 1992 Cable Act by allowing the merged firm potentially to deal it a death blow by excluding it from the DBS market. In support of its position, The Word Network cites language from a decision by the D.C. Circuit Court of Appeals in *Time Warner Entertainment Co., L.P., v. FCC*.¹⁶⁵ The provision of the 1992 Cable Act that gave rise to the *Time Warner* decision, however, applies only to

¹⁵⁸ *Review of the Commission’s Broadcast and Cable Equal Employment Opportunity Rules and Policies*, 16 FCC Rcd 22843 (2001) (“*EEO NPRM*”).

¹⁵⁹ CHC Letter at 2.

¹⁶⁰ The Commission has previously ruled on transfer applications involving DBS licenses but none of those decisions addressed the impact of the proposed transfer on program diversity. *See, e.g. USSB- DirecTV Order, Tempo-DirecTV Order*, n. 39-40, *supra*.

¹⁶¹ *Amendment of Section 73.658(g) of the Commission’s Rules – The Dual Network Rule*, 16 FCC Rcd 11114, 11131 (2001).

¹⁶² *Id.*

¹⁶³ Applicants’ Reply Comments at 124.

¹⁶⁴ Word Petition at 3.

¹⁶⁵ 240 F.3d 1126, 1132 (2001) (“the government must ensure that a programmer has at least two conduits through which it can reach the number of viewers needed for viability.”)

cable television operators, not DBS providers.¹⁶⁶ Further, The Word Network fails to explain how the possible denial of carriage by the New EchoStar would in fact deal it a “death blow” when it could reach consumers through other delivery systems. The Word Network’s own comments state that its programming currently is carried on cable systems serving four million customers and on over-the-air television stations reaching six million homes.¹⁶⁷ In view of the availability of cable television systems and broadcast television stations to distribute The Word Network’s programming – and considering their current use of those very platforms – its claim that the merger could deal it a death blow is not persuasive.

48. Finally, we disagree with Consumers Union’s recommendation that this license transfer proceeding is the appropriate vehicle to restructure the public interest set-aside obligations for the proposed New EchoStar. We established the current channel set-aside obligations, including the specific channel percentages, and the complaint process based on a well-developed record.¹⁶⁸ The conditions requested by Consumers Union raise issues that have application on an industry-wide basis.¹⁶⁹ Accordingly, we find that the specific recommendations made by Consumers Union with respect to public interest set-aside issues are properly addressed in the rulemaking setting rather than a subset thereof in the context of a merger application.

49. *Viewpoint diversity.* Although the Commission has not directly addressed the issue of the impact of a DBS license transfer on viewpoint diversity, the Commission has considered the role of DBS operators as contributors to viewpoint diversity. In 1999, the Commission adopted a rule limiting the number of radio and television stations one entity could own in a single market.¹⁷⁰ The ownership limit varies depending on the number of media “voices” in a particular market. The Commission determined that television stations, radio stations, daily newspapers, and the incumbent cable operator in the market would each count as one voice for purposes of the TV-Radio Ownership rule.¹⁷¹ The Commission declined, however, to count a DBS operator as a voice for purposes of the TV-Radio rule. The Commission explained that DBS operators did not appear to serve the same role in promoting diversity as cable operators because DBS operators did not carry local news and public affairs programming, due in part to their inability, at the time of that decision, to retransmit local broadcast signals.¹⁷² It appears the Commission also relied on cable operators’ duty to carry public, educational, and governmental channels in reaching its decision regarding DBS operators and the voice test.¹⁷³

50. For purposes of our review of the proposed transaction in this proceeding, however, we find that DBS operators do contribute to viewpoint diversity and that the loss of one such provider would

¹⁶⁶ 47 U.S.C. § 533(f)(2)(A) (directing the FCC to establish limits on the number of subscribers any one cable system operator may serve).

¹⁶⁷ Word Petition at 2.

¹⁶⁸ See *Implementation of Section 25 of the Cable Television Consumer Protection and Competition Act of 1992; Direct Broadcast Satellite Public Interest Obligations*, 13 FCC Rcd 23254 (1998).

¹⁶⁹ Consumers Union Comments at 20-21. For example, Consumers Union recommends that the Commission require New EchoStar to report on its contractual terms with programmers for the purpose of allowing the Commission to monitor New EchoStar’s compliance with the public interest obligations. It would seem anomalous for the Commission to require such disclosure by New EchoStar without requiring such disclosure by other DBS operators, particularly where the purpose would be to facilitate “benchmarking” of all DBS operators by the Commission.

¹⁷⁰ *Review of the Commission’s Regulations Governing Television Broadcasting; Television Satellite Stations Review of Policy and Rules*, (“Local Ownership Order”) 14 FCC Rcd 12903 (1999).

¹⁷¹ *Id.* at 12953.

¹⁷² *Id.*

¹⁷³ *Id.*

diminish the diversity available to American consumers. In the area of media ownership policy, the Commission has long emphasized the importance of market structures that promote viewpoint diversity. Where the Commission has not already adopted market structure rules that incorporate diversity goals, the Commission must evaluate the impact of a proposed transaction on its diversity goals. Given that the Commission has not adopted market structure rules affirmatively aimed at promoting competition and diversity for DBS firms, proposed transactions involving DBS licenses must undergo case-by-case analysis to determine their impact on these policy goals.¹⁷⁴

51. Courts have found that, by exercising their editorial discretion to select the programming channels carried on their distribution systems, both cable operators and DBS providers are engaged in speech entitled to First Amendment protection.¹⁷⁵ This gatekeeper role clearly affects which entertainment and news programming that millions of Americans can view. The aggregation of the vast majority of current DBS channels by one such editor reduces the potential for different editors to deliver a variety of news and current affairs to Americans through the carriage of different news and public affairs channels. This development harms viewpoint diversity by reducing the number of MVPD editors in all markets, and leaving only one in some markets. The recent dispute between Cablevision and the Yankee Entertainment Sports (“YES”) Network in New York illustrates this point with respect to sports and entertainment programming.¹⁷⁶ Two MVPDs (Cablevision and EchoStar) decided not to carry the YES channel, but a third MVPD (DirecTV) elected to carry that channel.¹⁷⁷ The presence of DirecTV in the market, in this instance, clearly affected the programming that was made available to several million households.

52. Our finding that the proposed merger of EchoStar and DirecTV would diminish viewpoint diversity is not inconsistent with the Commission’s decision to deny “voice” status to DBS operators in the context of the TV-Radio rule. The TV-Radio proceeding answered a narrow question – whether DBS operators should be considered a “voice” for purposes of that rule. The Commission’s answer in that context does not mean that DBS plays no role in promoting diversity. In fact, the principal rationale for the Commission according cable a voice in the first place – that “most programming is either originated or selected by the cable system operator”¹⁷⁸ – is fully applicable to DBS operators. Moreover, while DBS operators in 1999 were unable to retransmit local broadcast signals to their subscribers, they are able to do so today. Thus the factual underpinning of the Commission’s original decision regarding DBS operators has changed. Consequently, for purposes of this merger application and on the facts before us, we find that DBS operators play a role in promoting viewpoint diversity. The loss of the

¹⁷⁴ 2002 DBS Report and Order, n.16, *supra*.

¹⁷⁵ *Turner Broadcasting System v. F.C.C.*, 512 U.S. at 636.

¹⁷⁶ See e.g., Bob Scherman, *More Thoughts on the Road to Monopoly*, SATELLITE BUSINESS NEWS, Vol. 14, No. 9, May 8, 2002 at 6. The article highlights the YES Network dispute in New York as a good example of why a third provider in the MVPD market is essential. According to the article, the number of DBS service providers is the sole factor in determining how many alternatives consumers will have to their cable provider. As individual companies, EchoStar or DirecTV are the only “third choices” to the cable provider and it is this third choice “that affords consumers a modicum of protection against being victim to distributors who would become gatekeepers with more raw market power than ever before.” *Id.* In the YES Network case, if the New York market had only one cable provider and one satellite service provider, both providers could have easily held out against the YES Network to the detriment of a large number of home-team New York Yankee viewers.

¹⁷⁷ *Id.*

¹⁷⁸ *Local Ownership Order*, 14 FCC Red at 12953.

editorial function provided by one DBS operator diminishes viewpoint diversity by reducing the number of such editors available to American consumers.¹⁷⁹

53. *Employment diversity.* The Commission has historically obligated broadcasters and other FCC-licensed media companies to comply with rules requiring equal employment opportunity (“EEO”). Those rules were applied to broadcasters in 1969,¹⁸⁰ cable operators in 1984,¹⁸¹ and MVPDs (including DBS operators) in 1992.¹⁸² After the D.C. Court of Appeals struck down the EEO rules last year, the Commission initiated a proceeding to propose a new EEO rule consistent with the court’s decision.¹⁸³ That Notice proposed rules prohibiting discrimination in hiring as well as an EEO outreach program. In so doing, the Commission explained that it “remain[s] committed to prohibiting discrimination in employment and requiring broad and inclusive outreach in recruitment” by broadcasters and MVPDs.¹⁸⁴

54. CHC asserts that the Commission should reject the merger application because, *inter alia*, EchoStar today has inadequate representation of minorities in its executive ranks and has failed to commit the merged firm to “outreach within its executive and other senior-level ranks.”¹⁸⁵ The Commission suspended enforcement of the outreach program requirements of the rules for both broadcasters and MVPDs following last year’s D.C. Court of Appeals decision.¹⁸⁶ Thus, currently there are no outreach requirements. The issue of minority and female outreach, however, is under consideration in our pending EEO rulemaking, and any rules adopted in our EEO proceeding will apply to EchoStar and DirecTV irrespective of the outcome of their proposed merger.

55. *Conclusion.* In summary, we do not find that approval of the proposed merger would inevitably lead to a loss of program diversity. Nor do we believe that approval of the proposed merger would stand at odds with our commitment to employment diversity. In contrast, we do find that the elimination of one nationwide DBS editor through this merger, without any cognizable evidence of offsetting enhancement of viewpoint diversity, would disserve the Commission’s policy goal of viewpoint diversity. The potential harm that would result from this elimination must be weighed against any potential benefits of a combined entity. Thus, these conclusions will be included in the overall balancing of the potential public interest harms and benefits of the proposed merger.

¹⁷⁹ The Commission’s decision regarding the role of DBS operators in promoting viewpoint diversity is made on the information before us. It does not affect the validity of the “voice” component of the TV-Radio rule or any other media ownership rule, nor does it prejudge future media ownership decisions. The Commission recently initiated a comprehensive proceeding aimed at measuring the impact of various media outlets, including DBS, on viewpoint diversity. See *Biennial Review NPRM*, n.141, *supra*. That proceeding will thoroughly address the weight appropriately accorded DBS operators in connection with the Commission’s media ownership rules. For purposes of the instant license transfer application, we find that DBS operators contribute to viewpoint diversity.

¹⁸⁰ *Nondiscrimination in Employment Practices*, 18 FCC 2d 240 (1969).

¹⁸¹ Cable Communications Policy Act of 1984, Pub. L. No. 98-549, 98 Stat. 2779 (1984).

¹⁸² Cable Television and Consumer Protection and Competition Act of 1992, Pub. L. No. 102-385, 106 Stat. 1460, 1498 (1992).

¹⁸³ See *EEO NPRM*, n.158, *supra*.

¹⁸⁴ *Id.* at 22859.

¹⁸⁵ CHC Letter at 2.

¹⁸⁶ See *Suspension of the Broadcast and Cable Equal Employment Outreach Program Requirements*, 16 FCC Rcd 2872 (2001).

C. Impact of the Transaction on Spectrum Policy and Rules

56. Our public interest analysis requires a broad consideration of another key component of federal communications policy – the deeply rooted preference for competitive processes and outcomes, as shaped by Congress and reflected in various specific Commission policies.¹⁸⁷ Our public interest analysis in this proceeding, then, must consider the impact that the proposed merger would have on implementation of Congress' pro-competitive, deregulatory policies aimed at developing and encouraging competitive markets, as well as the Commission's well-established policies intended to carry out these Congressional mandates. The proposed merger would result in New EchoStar acquiring control of 100 percent of the available U.S. allotted full-CONUS DBS orbital locations. In addition, New EchoStar would acquire control of approximately 39 percent of the Commission authorized GSO FSS Ka-band orbital locations, and approximately 33 percent of the Commission authorized orbital locations with operational satellites in the GSO FSS C- and Ku- bands.¹⁸⁸ The nature of this Application, thus requires that we consider the impact of the proposed merger on long-standing federal spectrum policies, which are designed to promote spectrum efficiency and encourage competition in the radio communications markets.

57. As discussed below, we find that the Applicants' claims of improved spectrum efficiency have some validity. The record indicates that Applicants would clearly realize a private benefit from eliminating duplicative carriage of programming channels and that alternative means of achieving comparable efficiencies appear to have significant operational and economic disadvantages. Nonetheless, the record does not support Applicants' assertions that these private efficiencies will result in cognizable public interest benefits under our merger review standard. We also find, based on the record before us, that grant of the proposed merger appears to be inconsistent with well-established federal pro-competitive spectrum policies.

1. Spectrum Efficiency

a. Position of the Parties

58. *Applicants' Claims of Spectrum Efficiency.* Generally, the Applicants claim that the efficiencies gained from the combination of spectrum resources of EchoStar and Hughes will provide numerous public interest benefits in the MVPD markets.¹⁸⁹ They contend that one of the most important benefits will be the increase in spectrum efficiency that would result from the elimination of duplicative use of DBS spectrum.¹⁹⁰ Specifically, the Applicants claim that approval of the proposed merger would allow for the elimination of over 500 duplicative local and national program channels. According to the Applicants, EchoStar provides 709 channels of video programming, while DirecTV offers 739 channels of video programming, 588 channels of which are duplicative.¹⁹¹ Of these, EchoStar's Dish Network provides approximately 235 national programming channels, while DirecTV provides approximately 179 national programming channels, 150 of which are being duplicated by the companies.¹⁹²

¹⁸⁷ See *AT&T-TCI Order*, n.103, *supra*; *MCI-EchoStar Order*, n.18, *supra*.

¹⁸⁸ Combined, New EchoStar would hold 26 out of 67 Ka-band authorizations and 19 out of 56 C/Ku-band authorizations. See Appendix B,C, and D.

¹⁸⁹ See Section I.C.4, *supra*.

¹⁹⁰ See Application at 3-4, 27; Satellite Application at 3, 7-8.

¹⁹¹ Letter from Gary M. Epstein, Counsel for DirecTV, and Pantelis Michalopoulos, Counsel for EchoStar, to Marlene H. Dortch, FCC, dated May 16, 2002 ("EchoStar May 16 *Ex Parte*") at 3, Attachment, "Technical Presentation: DBS Spectrum/ Capacity Issues," at 17.

¹⁹² Application, Eng. Statement at 9.

59. The Applicants contend that elimination of duplicative local broadcast and national programming will allow the combined company to offer more niche national and local programming, expand offerings for HDTV programming, PPV, VOD, educational, specialty and foreign language programming, and offer other new and improved product offerings, including interactive services.¹⁹³ For example, the Applicants claim that currently, each company alone has only enough satellite capacity to offer two to three full-time HDTV channels. While technological advances may at best allow this capacity to double,¹⁹⁴ the Applicants claim that approval of the merger, which would make available newly-freed spectrum, would enable New EchoStar to offer at least 12 HDTV channels from one or more of its full-CONUS orbital locations.¹⁹⁵ In addition, the Applicants claim other benefits will result from the elimination of duplicative programming including the provision of significantly more new and diverse independent programming as well as more national programming networks and better quality DBS service to Americans living in rural areas, Alaska and Hawaii than could be achievable by each company operating independently.¹⁹⁶

60. The Applicants also claim efficiencies will be realized from the ability of the two companies to combine their satellite fleets. According to the Applicants, redeploying their combined satellite fleets would “significantly improve the utilization of the DBS spectrum and satellite resources.” Through the use of spot beam satellites at all three full-CONUS locations, the Applicants assert that New EchoStar could provide approximately 540 national channels and 940 local channels. Thus, the Applicants contend that combination of the satellite fleets would eliminate the inefficiencies of splitting up the 32 DBS frequencies at the 110° W.L. and 119° W.L. orbital slots between EchoStar and DirecTV and would allow New EchoStar to align the combined satellite fleet to the dictates of market efficiency.¹⁹⁷ Applicants claim that operational efficiencies will result from consolidating the two companies’ duplicative ground station complexes, which are used to backhaul national and local programming, uplink that programming to satellites, and provide primary and backup telemetry, tacking and command for satellites.¹⁹⁸

61. The Applicants also claim that the joint Satellite Application, which was filed subject to, and contingent upon, the grant of the Application, will also provide public interest benefits.¹⁹⁹ In the Satellite Application, the Applicants jointly seek authority to operate a new spot beam direct broadcast satellite, “NEW ECHOSTAR 1,” at the 110° W.L. using eight of the thirty-two DBS frequencies currently authorized separately to EchoStar and DirecTV.²⁰⁰ The Applicants claim that the proposed “Local Channels, All Americans” plan, which will utilize the NEW ECHOSTAR 1 satellite in conjunction with the DIRECTV 4S, DIRECTV 7S, ECHOSTAR 7, and ECHOSTAR 8 satellites, will allow for operation of a total of 28 spot-beam frequencies, and thereby provide approximately 1,500 broadcast channels to the 210 DMAs with required back-up and service expansion capabilities.²⁰¹ Thus, Applicants claim that NEW ECHOSTAR 1, which would operate only as a result of Commission

¹⁹³ *Id.* at 8-10.

¹⁹⁴ *Id.* at 10. *See also* Applicants’ Reply Comments, Attachment B, Barnett Decl. at 4.

¹⁹⁵ *Id.*

¹⁹⁶ Application at 5.

¹⁹⁷ Application at 36; Eng. Statement at 4-7.

¹⁹⁸ *Id.* at 7-8.

¹⁹⁹ *See* Satellite Application, *n.5, supra*.

²⁰⁰ *Id.* at 8.

²⁰¹ *Id.* at 8, 21. *See also* Applicants’ Reply Comments at 4-5.

approval of the proposed merger and Satellite Application, will permit the combined company to fill local coverage gaps while maintaining existing national programming.

62. The Applicants additionally maintain that if the proposed merger is approved, New EchoStar would transition to a common set-top box platform. Currently, DirecTV and EchoStar use different transmission formats, which require different set-top boxes.²⁰² These boxes have different conditional access systems, transport streams, and descrambling structures. The Applicants claim that the transition to a common set-top box platform would enable the combined company to achieve substantial manufacturing efficiencies, lowering the overall research and development costs as well as the per-unit cost of building receivers for a larger subscriber base.²⁰³ A common format set-top box would allow each subscriber to receive the maximum programming that New EchoStar's fleet of satellites and ground stations could offer. The Applicants assert that this common format set-top box would also foster a more level playing field with cable operators, who have used common technology and have shared research and development costs for cable set-top boxes for some time. The Applicants claim that the transition to new set-top boxes would begin almost immediately after the merger, and the transition's duration would occur over a three-year period. The Applicants assert that an exchange program would be done as seamlessly as possible at no cost to existing subscribers, and that during the transition satellite signals would be simulcast or encrypted so that subscribers owning either existing set-top box platform could continue to receive programming.²⁰⁴

63. *Opponents Challenges to Applicants' Claims of Spectrum Efficiency.* Merger Opponents argue that spectrum efficiency claims put forth by the Applicants do not necessitate the consolidation of all the current U.S. allotted full-CONUS DBS frequencies. They claim that there is no evidence that spectrum scarcity has been a constraint on competition between EchoStar and DirecTV to the detriment of the public interest and that any claimed benefits that would result from combining all full-CONUS DBS spectrum could be achieved by less anti-competitive means. For instance, some Opponents propose that the individual companies could form a joint venture to share channel uplinks and downlinks, and by using compatible set-top boxes, permit customers to receive programs from either company's satellites.²⁰⁵ Opponents also argue that any claimed benefits that would result from the proposed merger could be achieved by each company alone without need of the merger.²⁰⁶ Generally, the parties claim that each company alone has enough Ku-band CONUS capacity to offer local-into-local television broadcasting service to 100 markets, and possibly all 210 markets.²⁰⁷ They generally argue that this can be accomplished through a variety of technical means such as (a) increased use of spot beam satellites, (b)

²⁰² Application, Eng. Statement at 2.

²⁰³ *Id.* at 4-7.

²⁰⁴ *Id.* at 3. While the Applicants do not specify the duration of the transition, they note that the transition's goal is to quickly recover spectrum used in order to provide local programming to all 210 DMAs within 36 months of the merger's approval. As a result, all new customers following the merger's approval would receive "dual-speak" set-top boxes and satellite receiver dishes capable of receiving all DirecTV and EchoStar signals. EchoStar May 16 *Ex Parte* at 5-6, Attachment at 42.

²⁰⁵ Duke Law Reply Comments at 16-17; NAB Petition at 73; Pegasus Petition at 61; NRTC Petition at 63-64. Because antitrust laws do not prohibit "competitors from forming joint ventures or other limited arrangements to develop, produce, or market new products," NAB claims the Applicant's claimed efficiencies could not be considered "merger specific" in any event. NAB Petition at 89-90.

²⁰⁶ *See e.g.*, Duke Law Reply Comments at 18-22; NAB Petition at 76-82. Although most Opponents agree that the merger could eliminate duplicative programming, they contend that consolidating channel delivery and eliminating duplicative programming could be achieved through less anticompetitive means.

²⁰⁷ NAB Petition at 81; Pegasus Petition at 40-46; National Consumers League Comments at 2; NRTC Petition at 56-59.

improved modulation, (c) improved video compression techniques, and (d) other technical improvements.²⁰⁸

64. *Spot beam satellites.* Many Opponents assert that without the merger, both EchoStar and DirecTV are capable of providing local channels to a significant number of DMAs. In particular, NRTC states that assuming that the only satellites that will be used are those currently in orbit or on order and that current plans for use of spot beams will be implemented by the two companies, DirecTV would be able to provide local channels to approximately 110 DMAs²⁰⁹ and EchoStar would be able to provide local channels to approximately 80 DMAs.²¹⁰ Similarly, Pegasus suggests each company could serve 100 DMAs with their existing and planned spot beam satellites.²¹¹ Pegasus claims that, with the use of DBS spot beam satellites, both companies individually are capable currently of providing local service to 100 DMAs, and ultimately either company could serve 150-210 DMAs while still providing national programming, PPV and other digital services to subscribers.²¹² NAB notes that DirecTV launched its first spot-beam satellite in November 2001, and contends that this satellite re-uses frequencies an average of 7.33 times.²¹³ NAB notes that DirecTV has ordered another spot-beam satellite, which is scheduled to be launched in the second half of 2003, and also notes that EchoStar has ordered two spot beam DBS satellites.²¹⁴ NAB argues that frequency re-use factors of 10 or higher are practical,²¹⁵ and thus, EchoStar and DirecTV each will be capable of providing local channels to a significant number of DMAs.²¹⁶

65. *Improved modulation techniques.* NAB contends that with more robust modulation methods, such as 8PSK, at least a 30% increase in capacity can be attained,²¹⁷ yielding roughly 15-18 NTSC channels per transponder, as compared to 12-14 NTSC channels using standard methods of modulation and coding.²¹⁸ In addition, NAB claims that these numbers are likely to increase with future advances.²¹⁹ NAB references “Turbo Trellis Coded Modulation” (“Turbo TCM”) as an emerging technology that achieves improvements in efficiency by the combination of modulation and coding.

²⁰⁸ Pegasus Petition, Rusch Aff. At 4-11; NAB Petition at 84-89; Duke Law Comments at 22.

²⁰⁹ NRTC Petition, Morgan Declaration at 2-4. NRTC asserts that if DirecTV launches just one additional satellite beyond those on order, with spot beam technology on only three frequencies, DirecTV will be able to serve a total of 187 DMAs, leaving only 23 unserved. NRTC suggests that the 23 unserved DMAs could be served by using spot-beam technology with additional frequencies, by rearranging the spot-beams, or by other means. See NRTC Petition, Morgan Decl. at 2-3.

²¹⁰ NRTC Petition, Morgan Declaration at 2-4. NRTC asserts that if EchoStar launches just one additional satellite beyond those on order, with spot-beam technology on only three frequencies, it will be able to serve a total of 160 DMAs, leaving only 50 DMAs unserved. NRTC suggests that the 50 unserved DMAs could be served by using spot-beam technology with additional frequencies, by rearranging the spot-beams, or by other means. NRTC Petition, Morgan Declaration at 2-3.

²¹¹ Pegasus Petition, Rusch Aff. at 10.

²¹² Pegasus Petition at 44-46.

²¹³ NAB Petition, Gould Decl. at 3.

²¹⁴ *Id.*

²¹⁵ *Id.* at 4-5.

²¹⁶ *Id.* at 8.

²¹⁷ *Id.* at 7. Mr. Gould states that, as compared to QPSK, 8PSK in principle permits a 50 percent increase in data rate, but for analytical purposes assumes only a 30% increase would be achieved in actual practice.

²¹⁸ *Id.* at 7-8. Therefore, all other factors being equal, NAB asserts that the transponder channel capacity would increase to the same extent and will become 15-18 NTSC channels.

²¹⁹ *Id.* at 9.

According to NAB, improvements in decoding techniques and increases in processing capabilities speed have facilitated Turbo TCM, which achieves significantly higher data rates using the same bandwidth and power.²²⁰ Pegasus also asserts that “turbo coding” could increase channel capacity or throughput. According to NAB, such coding is currently being used on some satellites services to improve the signal robustness by as much as a factor of two, which could double the effective channel capacity.²²¹

66. *Improved video compression.* The merger Opponents argue that efficiency can be improved by using a higher compression ratio than the 10:1 ratio used predominantly today. Pegasus contends that compression algorithms have been improving along with the ongoing improvements in computational processing power and states that superb quality pictures at lower data rates can be expected in the near future as well as continued improvements going forward, without any changes to consumer equipment. Pegasus also asserts that the recently adopted “MPEG-4” standard can provide a reduction in data rates for the same program transmissions by a factor of two or three as compared to “MPEG-2.” Pegasus notes that although use of MPEG-4 would require upgrade of transmission equipment and a new class of set-top boxes, those changes could be implemented incrementally.²²² Cablevision Systems Corporation, on behalf of Cablevision and R/L DBS Company, LLC (“Rainbow DBS”) represents that it intends to use MPEG-4 for standard definition programming and MPEG-2 for high definition programming in its soon-to-be launched “Rainbow 1” DBS satellite.²²³ NAB similarly notes the benefits of digital compression and claims that compression ratios significantly higher than 10:1 are now technically, economically, and operationally feasible. Specifically, NAB asserts that both DirecTV and EchoStar have stated that they expect compression ratios to be 12:1 with existing hardware.²²⁴ Further, NAB observes that Harmonic, Inc., the manufacturer of the MPEG-2 encoders most widely used for DBS in the United States, now states that their current hardware, the “MV-50,” allows compression ratios of up to 14:1 with the same high quality and high availability of DBS systems in operation now.²²⁵

67. *Other technical improvements.* Pegasus and NAB also cite other technical improvements that could be made by DirecTV and EchoStar. For instance, Pegasus notes that currently pay-per-view movies and theatrical events are transmitted on dedicated transponders. With new mass media storage devices, Pegasus claims that many of these productions could be downloaded in advance and released on demand by means of controlled access features. Pegasus suggests that, by equipping set-top boxes with technology that permits customers to capture programming and watch it on their own schedule, both DirecTV and EchoStar can avoid repetitive programming, thereby freeing up a substantial amount of spectrum without a merger.²²⁶ NRTC additionally suggests that EchoStar could use Ka-band (18.35-18.8 GHz and 19.7-20.2 GHz) technology to provide local-into-local service. It notes that EchoStar is authorized to construct and launch satellites for two full-CONUS Ka-band orbits, and recently received authorization to acquire control of another unconstructed CONUS orbital Ka-band authorization.²²⁷ To the extent the capacity is not used for broadband, NRTC claims EchoStar can use the satellites to provide

²²⁰ *Id.* at 13.

²²¹ Pegasus Petition, Rusch Aff. at 10.

²²² *Id.* at 11.

²²³ Letter from Howard J. Symons, Mintz Levin on behalf of Cablevision and R/L DBS Co. to Marlene H. Dortch, Secretary, FCC (Sept. 18, 2002) (“Cablevision Sept. 18 *ex parte*”) at 7, 9. Rainbow DBS, a venture of Cablevision Systems Corporation (“Cablevision”), is the licensee of 11 frequencies at 61.5 W.L., the easternmost of U.S. DBS orbital slots. *See R/L DBS Petition*, n.21, *supra*.

²²⁴ NAB Petition, Gould Decl. at 6.

²²⁵ *Id.* at 7.

²²⁶ Pegasus Petition, Rusch Aff. at 12.

²²⁷ *See* n.23, *supra*.

additional local-into-local service.²²⁸ NAB states that either firm could use satellite dishes that receive signals from two or three different orbital locations, instead of a single location, allowing consumers to receive more programming.²²⁹

68. *Implementation.* Pegasus maintains that, using current design practices, EchoStar and DirecTV each could support full-CONUS local-into-local coverage of all 210 DMAs using a total of 16 frequency blocks divided between two satellites, while retaining their existing QPSK set-top boxes.²³⁰ Pegasus claims that one such system would use two satellites at two orbital positions, with each satellite having 29 spot beams carrying approximately one-half the local television signals, plus a CONUS-coverage antenna for national signals. Alternatively, Pegasus maintains that CONUS coverage could be provided by a third satellite, including one that is already in service. These satellites, according to Pegasus, would utilize only technology already launched or under construction by the Applicants, and only about one-third of each Applicant's total spectrum would be devoted to local-into-local service.²³¹ Pegasus contends that, if the merger proceeds, implementation of local-into-local service would require two or three years for design, construction, and launch of appropriate new satellites, at a cost of approximately \$250 million each (satellite, launch vehicle, and insurance). In addition, Pegasus contends that there would be a need for four to six additional uplink earth stations that would cost approximately \$30 million in total capital costs. However, Pegasus maintains that some of the spot beam satellites currently under construction by DirecTV and EchoStar could be modified for full local-into-local service at a cost of only \$10-\$20 million.²³²

69. NAB asserts that DirecTV and EchoStar each have ample capacity, using the techniques that one or both companies are already using, to offer all eligible TV stations in all local markets in the United States while continuing to deliver all of the national programming they currently deliver from their full-CONUS Ku-band slots. In addition, NAB claims that each company could further add substantial amounts of new national programming from those same slots. NAB claims that, using available techniques that apparently neither DirecTV nor EchoStar have yet exploited such as 8PSK, the two firms could separately deliver still more programming using the CONUS frequencies.²³³

70. Pegasus also contends that, regardless of the merger, efforts to expand local-into-local service and to develop new technology to maximize the efficient use of the spectrum will require substantial resources such as time and money.²³⁴ For instance, Pegasus claims that making the spectrum efficiency benefits of the merger available to all subscribers, as proclaimed by the Applicants, would require that customers be provided with a dish and set-top boxes that are capable of receiving programming from all three DBS orbital slots. Further, many of the alleged improvements that would result under the proposed merger would require modifications to existing set-top boxes, and New EchoStar would need to integrate its customer base on a common platform because EchoStar and DirecTV use different compression standards. Pegasus also claims that many of New EchoStar's customers would require new antennas for local-into-local service, depending on how the New EchoStar system is configured. Pegasus asserts that it is not clear that there are any additional upgrade cost

²²⁸ NRTC Petition at 59-60.

²²⁹ NAB Petition at 84.

²³⁰ Pegasus Petition, Rusch Aff. at 8.

²³¹ *Id.*

²³² *Id.*

²³³ NAB Petition, Gould Decl. at 18.

²³⁴ Pegasus Petition, Rusch Aff. at 13-14.

efficiencies for a merged company because the costs and processes are essentially the same with or without a merger.²³⁵

71. NAB observes that EchoStar reported recently that it has already designed a set-top box that will enable its subscribers to receive DirecTV programming; the one remaining step is for DirecTV to download certain software by satellite to EchoStar's set-top box.²³⁶ Although the two systems use different encryption systems, NAB notes that EchoStar and DirecTV's Joint Engineering Statement indicates that the two companies are considering transmitting programming using "simulcrypton," which – without the need for a uniform set-top box across all customers – would enable subscribers owning either set-top box to receive their existing programming. According to NAB, a joint venture could also employ this technique.²³⁷

72. NAB notes that the Applicants have failed to disclose how many markets each company individually could serve with its own satellite fleet, or proposed fleet. NAB contends that without further information on how many markets each company alone can serve with local-into-local programming, it is impossible to tell whether the local-into-local benefits are merger-specific. According to NAB, the Applicants have failed to disclose how many markets each company separately could serve with their own satellite fleets, or proposed fleets.²³⁸ It notes that prior to the merger, DirecTV already launched its first spot beam satellite, DIRECTV 4-S, and had plans to launch a second spot-beam satellite, DIRECTV 7-S. It states that EchoStar also had pre-merger plans to build and launch two spot-beam satellites, ECHOSTAR 7 and 8, both to provide local-into-local TV broadcasting service. The State of Alaska claims that it is not clear that the merger will result in the claimed benefits to the residents of Alaska given that the Applicants propose to shift programming from satellites located at 119° W.L. to 101° W.L. According to the State of Alaska, it has been its experience that eastward shifts degrade service in some parts of Alaska and eliminates programming to other parts altogether.²³⁹

73. *Applicants' Response to Opponents' Claims.* In response, the Applicants claim that the proposed merger would achieve spectrum efficiencies necessary to facilitate the delivery of local programming to smaller markets that neither EchoStar nor DirecTV alone could serve. They claim that increased spectrum efficiencies would change the economics of providing local service by spreading the costs over a larger subscriber base, thus enabling New EchoStar to provide local programming service to these smaller markets that neither company alone could serve.²⁴⁰ The Applicants also assert that the proposed merger would result in the provision of more reliable service. Such reliability, they claim, can be attributed to two primary factors – the increased redundancy associated with more in-orbit satellites that can deal with unexpected satellite failures, and the ability to use additional capacity, where available, to increase the amount of error correction applied to the DBS signal.²⁴¹

74. The Applicants argue that the technological solutions to the capacity problems proposed by the parties are technically and economically unrealistic. The Applicants claim that new compression techniques would result in only limited capacity efficiency gains with significant costs, including, but not

²³⁵ *Id.* at 14.

²³⁶ NAB Petition, Gould Decl. at 15-16.

²³⁷ *Id.* at 16.

²³⁸ NAB Petition at 77-79.

²³⁹ State of Alaska Comments at 10.

²⁴⁰ *See e.g.*, Applicants' Reply Comments at 19-24.

²⁴¹ *Id.* at 11.

limited to, replacing all current set-top boxes.²⁴² Similarly, the Applicants argue that the Opponents' call for the launching of high-capacity "super satellites" would entail significant costs, risks, and technical difficulties.²⁴³ The Applicants also dispute the Opponents' proposals for new modulation and video coding schemes to improve capacity. The Applicants claim that these schemes would result in signal interference and decreased service quality, and that they would require costly new set-top boxes. In addition, they claim that current and planned DBS satellites lack sufficient power to accommodate the adoption of these modulation schemes.²⁴⁴ Finally, the Applicants contend that the Opponents' claims with regard to the Applicants' individual capabilities to provide local programming fail to take into account the need for future expansion of national programming and new or increased services – such as HDTV, new national networks, additional PPV, VOD, ITV, and educational television.²⁴⁵

75. The Applicants state that without the merger, DirecTV will be able to serve approximately 70 DMAs and EchoStar will be able to serve 50 DMAs.²⁴⁶ The Applicants also state that the Opponents ignore the economic realities in assessing how many DMAs each company could serve individually and they reiterate that absent the merger, expanding local service into all 210 DMAs would not be profitable.²⁴⁷ Satellite companies must assess "the net present value of adding local channels, and only decide to expand local channel coverage that will bring them a sufficient return."²⁴⁸ The Applicants state that the ability to increase revenue decreases as the size of the DMA decreases,²⁴⁹ and argue that the Opponents have not factored in such things as the opportunity cost of forgoing national programming to make room for local channels and the cost to launch and operate a new spot beam satellite.²⁵⁰ The Applicants contend that, despite future technological developments in spectrum efficiency that would enable the companies to increase satellite capacity (such as improved digital compression techniques), increased demands for satellite bandwidth (such as satellite must-carry requirements and HDTV carriage) will more than consume available satellite capacity.

76. With respect to the possibility of a joint venture in lieu of a merger, the Applicants disagree with the Opponents that such a venture could produce efficiencies comparable to a merger. The Applicants contend that, absent a merger, neither DirecTV nor EchoStar would be willing to give up control of its core satellite and spectrum resources. The Applicants note that standardization of

²⁴² EchoStar May 16 *Ex Parte* at 4, Attachment at 24-26. The Applicants argue that the merger's Parties have made unrealistic assumptions with regard to compression ratios, noting a 10:1 ratio is realistic in light of current technology and acceptable television picture quality, while the Parties' proposed 12:1 ratio could only be used under very limited circumstances at present and would certainly not be feasible to achieve the Parties' goals in a current DBS operational system. Applicants' Reply Comments, Barnett Decl. at 9-12.

²⁴³ EchoStar May 16 *Ex Parte* at 4-5, Attachment at 29. EchoStar contends that the proposed satellite designs are superficial, untested, and in error to the point of being infeasible. Applicants' Reply Comments, Barnett Decl. at 1, 8-9, 21-36.

²⁴⁴ EchoStar May 16 *Ex Parte* at 4, Attachment at 22, 27-28; Applicants' Reply Comments, Barnett Decl. at 13-16.

²⁴⁵ Applicants' Reply Comments, Barnett Decl. at 2, 8. The Applicants argue that the allocation of 16 and 19 full-CONUS DBS frequencies to local programming as suggested by the Parties is unacceptable given DirecTV's total capacity of 46 frequencies and EchoStar's total capacity of 50 frequencies and future demand for expansion of national programming. In contrast, the Applicants argue that the merger would realistically allow for the allocation of 16-19 frequencies out of a combined pool of 96 frequencies in order to provide coverage for all 210 DMAs. *Id.*

²⁴⁶ See EchoStar May 16 *Ex Parte*, Attachment at 33.

²⁴⁷ Applicants' Reply Comments at 7.

²⁴⁸ *Id.* at 15-16.

²⁴⁹ Applicants' Reply Comments, Willig Decl. at 10-11.

²⁵⁰ *Id.* at 10-11.

equipment would require one of the two companies to replace its equipment, putting it at an economic disadvantage.²⁵¹ More specifically, the Applicants, contend that there are technical differences between the EchoStar and DirecTV system architectures that effectively preclude the implementation of any type of joint venture to share spectrum and orbital resources. The Applicants also contend that there are numerous operational risks and control-related difficulties associated with a joint venture, even if the technical difficulties could be overcome. The Applicants highlight piracy countermeasures and broadband deployment as two areas in which a joint venture would be unworkable because, they contend, the costs and complexities associated with such a venture would far exceed the benefits.²⁵² With respect to broadband deployment, the Applicants contend that a joint venture could not reach the five million customers that are needed for scale.²⁵³ The Applicants conclude that only a merger can create new DBS capacity and output, intensify competition with cable, and generate benefits for consumers.²⁵⁴

b. Discussion

77. There can be little doubt that the proposed merger offers technical benefits in terms of improving the overall current efficiency of use of the DBS spectrum by eliminating carriage of duplicative video programming. It also is evident that increased spectrum efficiency would make available satellite system resources that could be used for other purposes. For example, the resource savings could be used to offer local-into-local service on a broader scale to a greater number of DMAs, increase the diversity of program offerings, or implement advanced services such as HDTV.

78. We agree, however, with the Opponents that even absent the merger, it is reasonable to assume that each company would likely offer local-into-local broadcasting service to at least 80 to 100 DMAs within the next one to two years based on the new and planned satellites that will soon go into service. As the Opponents point out, the latest satellites offer significant improvements in spectrum efficiency through use of spot beams.²⁵⁵ These new satellites effectively double the capacity to offer local channels for each company. Therefore, given that EchoStar and DirecTV each currently provide local service to approximately 40 markets, we believe it is reasonable to anticipate that, without the merger, company would be able to offer local broadcasting service to 80 to 100 DMAs within the next one to two years. This would permit the Applicants to serve about 80-85% of TV households with local-into-local service without the merger.²⁵⁶

79. The technical improvements that would be required for each company to offer local-into-local broadcast television service to the remaining 15-20 percent of TV households (in the unserved 130 to 110 DMAs) and expansion of service offerings such as HDTV to these customers are extensive and more difficult to predict. The Opponents' arguments that each company could provide service to all or

²⁵¹ Applicants' Reply Comments at 30.

²⁵² Letter from Pantelis Michalopoulos, Esq. on behalf of EchoStar to Marlene Dortch, Secretary, FCC (July 11, 2002), (submitted by transmittal letter dated July 12, 2002) at 1-2 ("EchoStar July 11 *ex parte*").

²⁵³ *Id.*, Attachment at 17.

²⁵⁴ *Id.*, Attachment at 19.

²⁵⁵ We note that DirecTV recently deployed DIRECTV-4S, which uses 26 spot beams with 6 transponders. Further, in 2003 DirecTV plans to launch DIRECTV-7S, which apparently will have characteristics similar to DIRECTV-4S. EchoStar recently deployed ECHOSTAR-7S, which uses 5 spot beams. Further, EchoStar recently successfully launched ECHOSTAR-8S, but that satellite is not yet in service.

²⁵⁶ See "Nielsen Media Research Local Universe Estimates:" <http://www.nielsenmedia.com/DMAs.html>. We note that some relatively large DMAs are not served by both DirecTV and EchoStar. For example, EchoStar does not serve the Baltimore DMA, which ranks 24th in the number of TV households. See [wysiwyg://20/http://www.dishnetwork.com/content/programming/locals/index.shtml](http://www.dishnetwork.com/content/programming/locals/index.shtml)

close to 210 DMAs are based largely on anticipated technological advances or very aggressive use of currently developed technologies. For example, some Opponents argue that it is now feasible to use spot beam satellites that re-use spectrum much more intensively than the satellites currently used or planned by the Applicants.²⁵⁷ We agree with the Applicants, however, that the spot beam satellites on which the Opponents base their claims may not be technically and economically viable at this time. We also find that the Applicants have raised legitimate technical issues relative to a possible shift to more efficient modulation techniques, such as the availability of satellite on-board processing and adequate power, as well as interference concerns. In addition, changes in the modulation methods would require replacement of existing subscriber set-top boxes and it is not clear that each company on a stand-alone basis would have an economic incentive to make such an extensive change, all other factors being equal. This is not to say that these technologies would not be economically feasible today in a “greenfield” application where equipment replacement is not required. While the Opponents claim that improved video compression ratios of 12:1 or better are feasible, we accept the Applicants’ assertions that such video compression levels are not satisfactory today for all programming, particularly programming having a high degree of motion, such as sports.

80. It is also noteworthy that, under the Applicants’ proposal, it would take a full three years to achieve the full efficiency improvements that would enable New EchoStar to expand local-into-local service to most areas. The record indicates that the great majority of television households will receive local-into-local service from both DirecTV and EchoStar within this timeframe even absent the merger. Therefore, any merger-specific benefits that the merger might produce with respect to local-into-local service would, at best, accrue to a small percentage of potential viewers. Further, we have every reason to believe that technological advances that will increase the efficiency of DBS will continue to be developed as they have in the past. We simply do not know what specific techniques may become economically and technically feasible, and in what timeframes. In such a case, the gap between the expanded service that may be provided under the merger and what might be achieved through normal technological advances would not be significant. In any event, any expanded service offerings that may result from improvements in spectrum efficiency, such as increased carriage of HDTV and ITV services, must be weighed against the non-technical drawbacks of the merger, which include the elimination of an existing DBS provider in every market.

81. With regard to whether similar spectrum efficiencies might be achieved through a joint venture, we find that the Applicants have not demonstrated that this is technologically infeasible. The Applicants’ criticisms of a joint venture are based largely on business issues. They present no immutable reason why these issues could not be addressed through appropriate business arrangements. As to the claimed benefit of increased service to Alaska and Hawaii, the Applicants have not demonstrated that the merger is necessary for this purpose. Finally, with regard to the Opponents’ claim that Ka-band satellites could be used to provide DBS service, we find that such claims are not relevant because this use of frequencies would require new equipment for each subscriber irrespective of the merger. In addition, we do not expect that Ka-band satellites would be used for DBS service within the next two to three years.

82. In sum, we find that the proposed merger would offer technical benefits in terms of improving the overall current efficiency of use of the DBS spectrum by eliminating carriage of duplicative channels of video programming, and that the increased spectrum efficiency would make available satellite system resources that could be used for other purposes. The central question whether

²⁵⁷ Mr. Morgan, for NRTC, contends that both EchoStar and DirecTV could increase capacity sufficiently to serve all 210 DMAs by adding a single satellite using 46 to 50 spot beams with a frequency reuse of 17:1 for EchoStar and 15:1 for DirecTV. We observe that this is nearly twice as many spot beams as are used on the current generation of DBS spot beam satellites. For example, DIRECTV-4S and DIRECTV-7S each use 26 spot beams and ECHOSTAR-8S uses 25 spot beams. All of the existing spot beam satellites achieve frequency reuse between approximately 5:1 and 10:1.

the competitive structure that results from a combination of the only two full-CONUS DBS operators is likely to result in cognizable public interest benefits, such as reduced prices or the addition of new and innovative services, is analyzed in Section V.C. below.

2. Spectrum Policy Concerns

a. Positions of the Parties

83. As we noted above, approval of the proposed merger would place a significant amount of spectrum resources under the control of a single entity, most notably placing all the full-CONUS DBS authorizations under the control of the newly merged company. Several merger Opponents object to the proposed merger claiming that placing all of the U.S. assigned full-CONUS DBS orbital locations under the control of a single entity would violate Commission policy and rules on spectrum concentration and concentration of control of orbital positions.²⁵⁸ They contend that the approval of the proposed merger would allow an extraordinary combination of scarce resources creating a monopoly in the provision of DBS service and eliminating substantial MPVD and satellite broadband competition throughout the country.²⁵⁹

84. Specifically, the merger Opponents argue that the Commission has never previously approved an action that led to a spectrum monopoly, and refer to a number of proceedings, such as the Commission's determination to license two Digital Audio Radio Satellite ("DARS") and the adoption of the Commercial Mobile Radio Services ("CMRS") spectrum caps, as examples where the Commission used spectrum policies to promote competition.²⁶⁰ Opponents also assert that if the license transfers are granted, New EchoStar would control as much as one-third to one-half of the U.S. authorized Ka-band satellites capable of serving the CONUS.²⁶¹ The Opponents contend that this spectrum, along with all the full-CONUS DBS frequencies, and the substantial C-band and Ku-band FSS capacity that would be controlled by New EchoStar post-merger, would completely eliminate competition in the satellite broadband market.²⁶² The Applicants have not, according to the Opponents, demonstrated that all this capacity is necessary to offer a viable broadband satellite service²⁶³ and that such results are clearly

²⁵⁸ See e.g., NAB Petition at 105-111; Pegasus Petition at 63-68; Duke Law Reply Comments at 23, 25-26. See also NRTC Petition at 38-41, asserting the merger violates the Commission's long-standing policy to promote facilities-based competition as it would eliminate facilities-based competition in the high-powered DBS market.

²⁵⁹ See e.g., Pegasus Petition at 8.

²⁶⁰ See e.g., NAB Petition at 107-110; Sidak Decl. at 17-18; Pegasus Petition at 61-62, 66-67; Duke Law Reply Comments at 25.

²⁶¹ See e.g., NRTC Petition at 52, NAB Petition at 103, Pegasus Petition at 70-71. Pegasus states that full CONUS coverage could be achieved from 62° W.L. to 135° W.L. and that of the total 35 orbital locations assigned in that range, 8 Ka-band orbital locations would be under the control of New EchoStar, as well as 3 Ka-band orbital locations that are assigned to affiliates of Wildblue Communications, in which EchoStar holds a 20% voting interest.

²⁶² See e.g., NAB Petition at 103, NRTC Petition at 50, Pegasus Petition at 63, 69-71.

²⁶³ See e.g., Pegasus Petition at 72; NRTC Petition at 55; Duke Law Reply Comments at 23.

inconsistent with the Commission's policies against warehousing of spectrum and orbital slots²⁶⁴ and in violation of Section 25.140(e) and (f) of the Commission rules.²⁶⁵

85. The Applicants respond that the proposed merger is not contrary to Commission spectrum policies. Particularly, they claim the proposed merger would allow for the elimination of duplicative use of the spectrum, clearly one of the Commission's key spectrum objectives.²⁶⁶ They contend that the proposed merger will have pro-competitive, not anti-competitive, effects in the MVPD market and assert that the Commission's competitive analysis should not be based on a "band-by-band" market definition, but on competition available in the entire market.²⁶⁷ In this respect, Applicants contend that the proposed merger would not preclude other companies from opportunities to use satellite spectrum and orbital locations, as well as other technologies, to introduce competition in the MVPD market.²⁶⁸

86. Further, the Applicants claim that the proposed merger is necessary to create a "true" competitive broadband service alternative.²⁶⁹ The Applicants assert that approval of the proposed merger will not result in spectrum warehousing or in precluding additional entrants from providing high-speed and advanced services,²⁷⁰ but rather will help fulfill several of the Commission's stated broadband principles and policy goals.²⁷¹ The Applicants claim that 11 other entities not affiliated with either EchoStar or Hughes have Ka-band authorizations for orbital locations capable of serving all CONUS locations, and contend that this demonstrates that there are more than enough prime Ka-band slots controlled by others to ensure that the merger will not stifle competition in providing broadband services.²⁷² Finally, the Applicants assert that the Commission has never applied Section 25.140(e) and

²⁶⁴ See e.g., Pegasus Petition at 71; NRTC Petition at 52-53, 55; Duke Law Reply Comments at 23. NRTC, for instance, asserts that little progress has been made by either EchoStar or Hughes/PanAmSat in launching a Ka-band business. They point out that EchoStar and Hughes' announcements of delays in launching, failed plans of other Ka-band licensees, and the high capital costs required to build Ka-band satellites, as acknowledged by both parties, raises substantial questions about whether all the Ka-band satellites will be constructed. Allowing the merger would aggravate the problem by tying up valuable orbital locations to the disadvantage of potential competitors.

²⁶⁵ See e.g., NAB Petition at 110; NRTC Petition at 52-53; Pegasus Petition at 71-72. The parties assert that the proposed merger would violate Sections 25.140(e) and (f) of the Commission rules which state that applicants for FSS licenses may only initially be assigned two orbital locations in a frequency band, and that an applicant with two authorized but unused orbital locations in a band may be assigned no more than one additional orbital position in that band. See 47 C.F.R. §§ 25.140(e) and (f). They claim that New EchoStar would obtain additional Ka-band orbital locations even though neither EchoStar nor Hughes has yet constructed and brought into operation previously authorized Ka-band satellites.

²⁶⁶ See Application at 27; Applicants' Reply Comments at 30-31; Letter from Pantelis Michalopoulos, Esq. on behalf of EchoStar and Gary M. Epstein on behalf of Hughes to Marlene Dortch, Secretary, FCC (October 8, 2002) Vol. 1, Attachments 2, 5 (Applicants Oct. 8 *ex parte*).

²⁶⁷ The Applicants claim that the product market is the MVPD market, not three DBS slots, not even satellites only. See Applicants' Reply Comments at 32-33.

²⁶⁸ *Id.* at 49, 109.

²⁶⁹ See *Id.* at 81. Applicants contend that neither EchoStar nor Hughes alone could timely deploy an affordable satellite broadband service to consumers and that the merger is necessary to enable such timely deployment. *Id.* at 96.

²⁷⁰ *Id.* at 50, 109.

²⁷¹ *Id.* at 82. For instance, Applicants claim approval of the proposed merger will encourage ubiquitous availability of broadband access to the Internet to all Americans, promote competition across different platforms, and ensure that broadband services exists in a minimal regulatory environment that promotes investment and innovation. *Id.*

²⁷² *Id.* at 109-110.

(f) to a merger and has explicitly waived these rules with respect to the Ka-band license applications.²⁷³ Thus, Applicants claim that the merger does not conflict with any Commission satellite orbital position rules or spectrum concentration policy.

b. Discussion

87. One of our foremost concerns in reviewing the proposed merger is the impact that concentration of 100% of the current U.S. allotted full-CONUS DBS spectrum in a single company would have on competition in the overall MVPD market and on our spectrum policies generally. As we discuss elsewhere in this Order, based on the record before us, we have concerns that permitting these two DBS competitors to merge would have a negative impact on competition in the MVPD market to the ultimate detriment of consumers. As discussed below, we have further concerns that the proposed merger would run counter to well-established federal pro-competitive spectrum policies.

88. This Commission has a long-standing policy of promoting competition in the delivery of spectrum-based communications services and has implemented numerous measures to foster entry and ensure the availability of competitive choices in the provisioning of such services. For instance, in the DARS proceeding, the Commission established a licensing approach that provided for two DARS licensees because it determined that more than one DARS licensee was necessary “to ensure competitive rates, diversity of programming voices, and other benefits of a competitive DARS environment.”²⁷⁴ Similarly, in the initial provisioning of the radio cellular service, the Commission determined that the licensing of two systems for every cellular service area would best serve the public interest as it would “foster important public benefits of diversity of technology, service and price, which should not be sacrificed absent some compelling reason.”²⁷⁵ Consistent with this policy, the Commission determined that a competitive market was also the best way to introduce personal communication services (“PCS”) to the public and adopted various measures to ensure that PCS licenses would be disseminated to a wide variety of applicants.²⁷⁶ Later, the Commission took actions to further its competitive policies by establishing a spectrum cap for CMRS.²⁷⁷ In doing so, the Commission found that such action would promote pro-competitive ends in the CMRS markets and “discourage anticompetitive behavior while at the same time maintaining incentives for innovation and efficiency.”²⁷⁸ The initiatives adopted by the Commission in the CMRS markets have resulted in a strong growth of competition in those markets,

²⁷³ *Id.* at 110.

²⁷⁴ See *Establishment of the Rules and Policies for the Digital Audio Radio Satellite Service in the 2310-2360 MHz Frequency Band*, 12 FCC Rcd 5754, 5786 (1997).

²⁷⁵ See *An Inquiry Into the Use of the Bands 825-845 MHz and 870-890 MHz for Cellular Communications Systems; and Amendment of Parts 2 and 22 of the Commission’s Rules Relative to Cellular Communications Systems*, Report and Order, 86 FCC 2d 469, 476, 478 (1981).

²⁷⁶ See *Amendment of the Commission’s Rules to Establish New Personal Communications Services*, 9 FCC Rcd 4957 (1994). The Commission stated that its actions were designed “to enable PCS providers to compete effectively with each other and with other wireless providers so that the American public can enjoy the greatest benefit from the delivery of these new services.” *Id.* at 4960.

²⁷⁷ *Implementation of Sections 3(n) and 332 of the Communications Act, Regulatory Treatment of Mobile Services, Third Report and Order*, 9 FCC Rcd 7988, 8100-01 (1994). To ensure that competition would shape the development of the CMRS market, the Commission took a number of steps, including adoption of a rule to cap at 45 MHz the total amount of combined broadband PCS, cellular, and Specialized Mobile Radio (SMR) spectrum in which an entity may have an attributable interest in any geographic area. *Id.* at 7995.

²⁷⁸ *Id.* at 8105, 8100.

leading to the Commission's recent action to sunset the spectrum cap rule, and rely instead on case-by-case analysis of the competitive effects of particular transactions to protect the public interest.²⁷⁹

89. The Commission has also employed measures to ensure competition in the provision of DBS service. For instance, in the DBS spectrum auction in 1995, the Commission limited applicants to having an attributable interest in no more than one full-CONUS orbital location.²⁸⁰ The Commission recognized that reducing concentration of full-CONUS DBS resources would promote competition and thereby benefit the public. Thus, the Commission implemented a one-time auction rule to ensure that each of the three full-CONUS DBS orbital locations would initially be controlled by entities that did not share interests with DBS operators at the other two orbital locations, and thus, permit the development of fully competitive DBS services.²⁸¹ Since that time, the Commission has carefully considered changes in DBS ownership, and has fashioned an approach which has resulted in no fewer than two DBS licensees to operate in the full-CONUS DBS spectrum.²⁸² Under this approach, competition between the two licensed facilities-based DBS providers, both with roughly balanced DBS spectrum resources, has resulted in significant consumer benefits, including increased satellite-delivered programming and services, competitive prices, innovative advanced technologies and improvements in overall quality of service to consumers.

90. We have recently taken additional steps to promote intermodal competition in the *2002 DBS Report and Order*.²⁸³ In that proceeding, we adopted a number of streamlining measures and other rule changes designed to facilitate the ability for DBS to become a more competitive service.²⁸⁴ For instance, our decision relaxed the rule for non-conforming use of DBS spectrum at all DBS orbital

²⁷⁹ See *2000 Regulatory Review of Spectrum Aggregation Limits for Commercial Mobile Radio Services*, Report and Order, FCC 01-328, 67 Fed Reg 1626 (“*CMRS 2000 Biennial Review*”). The Commission found that the spectrum cap had achieved its purpose as consumers have realized the benefits of competition in the form of increased output, lower prices, and increased diversity of service offerings. *Id.* at ¶ 35. Thus, the Commission has determined to replace spectrum caps with other regulatory mechanisms, including case-by-case review of spectrum aggregation and enforcement of other safeguards applicable to such carriers based on evidence of misconduct, to ensure that absent the spectrum cap, the benefits of competition in CMRS markets continue to be realized. *Id.* at ¶ 6.

²⁸⁰ See *1995 DBS Report and Order*, 11 FCC Rcd at 9723.

²⁸¹ *Id.*

²⁸² In April and May of 1999, the Commission issued three decisions that resulted in placing all current U.S. allotted full-CONUS DBS authorizations under the control of two DBS operators: *USSB-DirectTV*; *MCI-EchoStar*; and *Tempo-DirectTV*, n.39, 40, *supra.* In doing so, the Commission recognized that such consolidation would improve the ability of the DBS operators to compete in the MVPD market stating that additional full-CONUS spectrum would increase both companies' channel capacity, which was necessary for DBS operators to remain competitive, particularly with cable operators, in the MVPD market. See *Tempo-DirectTV*, 14 FCC Rcd at 7955. In none of these cases was it necessary for the Commission to analyze the competitive effects of a merger of the only two full-CONUS DBS providers. As the Commission recognized, the two DBS providers would compete with each other, and thus, the only relevant issue to resolve was whether allowing each individual DBS competitor to become a stronger competitor against other providers in the MVPD market would be in the public interest. *Tempo - DirectTV*, 14 FCC Rcd at 7955.

²⁸³ See *2002 DBS Report and Order*, n.16, *supra.*

²⁸⁴ *Id.* The Commission revised its rules and policies governing DBS service by, *inter alia*, incorporating its DBS service rules (Part 100) into other satellite service rules (Part 25) to eliminate inconsistencies, reduce confusion and uncertainty for users, lessen regulatory burdens on licensees, and simplify the development of advanced services. *Id.* at 11341-43. The Commission took these steps in an effort to promote competition in the MVPD market and thereby benefit the public by maximizing consumer choice, as well as better quality of service to the public, and to promote efficient and expeditious use of spectrum and orbital resources while maximizing flexibility for DBS operators. *Id.* at 11322.

locations.²⁸⁵ We found that, consistent with our spectrum management policies, a flexible use policy would promote greater spectrum efficiency by allowing DBS operators to determine specific services to be offered and would enable DBS operators to better compete with MVPD providers who have no similar restrictions.²⁸⁶ We believe the adoption of the flexible use policy will result in efficiencies that are conducive to the public benefit. We disagree with Applicants' claim that only by combining all full-CONUS DBS frequencies in a single provider would spectrum efficiencies be gained to the benefit of customers. The recent reforms to our DBS rules and policies were intended to accelerate competition in the MVPD market and provide DBS providers with appropriate flexibility to compete in the MVPD market in a manner that benefits consumers. These changes are only now being implemented and their impact is not yet known. We believe, however, that these measures will achieve our stated goals of a competitive DBS service without the risks to competition, discussed more fully below, that are associated with consolidating all full-CONUS DBS spectrum with one service provider.

91. In the *2002 DBS Report and Order*, we addressed the issue of whether any ownership restrictions on DBS licensees were necessary to promote our goal of full and fair competition in the MVPD market and our goal of spectrum efficiency.²⁸⁷ Although we found that *per se* restrictions on the number of full-CONUS orbital locations that one satellite company can control were not necessary, we specifically left open for consideration, on a case-by-case basis, whether ownership by one entity of all satellites located in all the full-CONUS orbital positions would be appropriate.²⁸⁸ In this case, the record indicates that allowing one satellite company to control all current U.S. allotted full-CONUS DBS orbital locations is not consistent with the public interest. The record demonstrates that significant benefits in the MVPD market have been brought about by the competition between EchoStar and DirecTV in all portions of the United States. The record also shows that consolidating all full-CONUS DBS spectrum with one provider would likely eliminate these benefits to the detriment of consumers, without providing adequate off-setting public interest benefits. Thus, we do not find the proposed transaction to be consistent with our long-standing policies that have brought about competition in the provision of DBS service, as well as competition between DBS and cable service.

92. Based on the record before us, we believe the proposed merger may be inconsistent with other long-standing Commission spectrum assignment and allocation policies as well. For instance, when establishing requirements for assignments and allocations of spectrum for use in a particular satellite service, our decisions are generally guided by a policy that promotes optimal use of spectrum for entry by multiple service providers.²⁸⁹ In establishing requirements for operating in the Ka-band, we adopted a band segmentation plan that we found would "promote[s] spectrum efficiency and facilitate[s] the

²⁸⁵ See *2002 DBS Report and Order*, n.16 *supra* at 11399-11402.

²⁸⁶ *Id.* at 11400, 11401-02. Our flexible use policy allows DBS operators to provide enhanced services including data access and high-speed Internet access using downlink frequencies (*i.e.* from the DBS operator to the customer). We did not adopt, however, the same flexibility with respect to the use of uplink frequencies (*i.e.*, from the customer to the DBS provider). *Id.* at ¶ 11402.

²⁸⁷ See *Id.* at 11332, 11398-99.

²⁸⁸ *Id.*

²⁸⁹ See, *1997 DARS Order*, 12 FCC Rcd at 5786. In the DARS proceedings, our review noted that "[w]hile we are not sure of the optimal amount of spectrum necessary for satellite DARS, it is our goal to try to determine spectrum block sizes and geographic areas that are most closely suited to provide for efficient provision of the most likely expected use. In this case, because this is a satellite service, the license areas should be nationwide and we have evaluated the evidence about the minimum spectrum block sizes necessary to economically provide satellite DARS. We begin our analysis of determining how much spectrum a single satellite DARS provider will require by considering what the record reveals about how many channels are necessary to operate an economically viable satellite DARS system."

deployment of diverse, interactive, competitive services for consumers.”²⁹⁰ Numerous applications have been received and authorized by the Commission, including applications from each of the Applicants, proposing Ka-band satellite systems that have the “potential to provide a wide variety of broadband interactive, direct-to-home, and digital services to all areas of the United States, including under-served and rural areas.”²⁹¹ The Applicants now claim in this proceeding that the combination of all full-CONUS DBS frequencies with the combined Ka-band frequencies and other spectrum resources that would result if the proposed merger is approved is necessary to produce a more competitive market place for broadband services.²⁹² As we discuss *infra*, the record before us fails to support the Applicants’ claim. Instead, the record raises concerns that the proposed merger would concentrate these substantial spectrum resources in one entity, resulting in disproportionate power in both the U.S. MVPD and satellite broadband markets to the disadvantage of consumers. We do not believe that such concentration of spectrum resources is necessary to create a competitive satellite-based broadband service, and as proposed, appears contrary to our spectrum assignment policies.

93. With respect to claims by some parties that the proposed merger would violate the Commission’s policies against the warehousing of spectrum and orbital slots, we find that it is not appropriate, in this proceeding, to make such a determination at this time. The milestone schedules, which are included as part of each Ka-band authorization, are designed to ensure that licensees will proceed with construction and launch of their satellites in a timely manner, and that the orbit location and spectrum resources are not held by licensees unable or unwilling to proceed with their plans.²⁹³ In addition, the Ka-band milestones were designed to meet critical ‘bring-into-use’ dates which the United States committed to under the International Telecommunications Union’s (“ITU”) coordination procedures.²⁹⁴ While there are claims on the record in this proceeding suggesting the possibility that future milestone requirements would not be met by New EchoStar, resulting in potential warehousing of scarce Ka-band spectrum resources, we find these claims are premature.²⁹⁵ The Commission has in place a separate milestone review process which it undertakes of each authorization to verify that the licensee is

²⁹⁰ See e.g., *Rulemaking to Amend parts 1, 2, 21, and 25 of the Commission’s Rules to Redesignate the 27.5-29.5 GHz Frequency Band, to Reallocate the 29.5-30.0 GHz Frequency Band, to Establish Rules and Policies for Local Multipoint Distribution Service and for Fixed Satellite Services*, Third Report and Order, 12 FCC Rcd 22310 (1997) (“*Ka-Band Rules Order*”).

²⁹¹ See e.g. *Ka-Band Assignment Orders*, n.28, *supra*.

²⁹² While the Applicants now assert that neither of the company’s stand-alone Ka-band satellite systems would result in timely deployment of affordable satellite broadband services to residential customers, the record indicates that it is more likely the current economic climate, and not spectrum constraints, that would prevent such deployment. See e.g., Applicants’ Reply Comments at 96-101.

²⁹³ Requiring licensees to adhere strictly to a milestone schedule prevents orbital locations from being warehoused by licensees to the exclusion of qualified entities that are prepared to implement systems immediately, and ensures that the scarce orbit spectrum resource is being used efficiently. See, e.g., *MCI Communications Corporation*, 2 FCC Rcd 233 (Common Carrier Bur. 1987); *Advanced Communications Corporation*, 10 FCC Rcd 13337 (Int’l Bur. 1995) (“*ACC Order*”); *Morning Star Satellite Company LLC*, 15 FCC Rcd 11350 (Int’l Bur. 2000) *aff’d*, 16 FCC Rcd 11550 (2001) (“*Morning Star Order*”). See also *Norris Satellite Communications, Inc.*, 12 FCC Rcd 22299 (Int’l Bur. 1997).

²⁹⁴ Failure to meet the ITU ‘bring-into-use’ date would result in the loss of U.S. priority in that orbital location, thus, allowing other countries to obtain coordination “priority” at that location. See, *Ka-Band Assignment Orders*, n.28, *supra*.

²⁹⁵ See e.g. Pegasus Petition at 72-73. If New EchoStar failed to meet the milestones for its Ka-band authorized satellite systems, the orbital locations associated with these milestones could be reassigned by the Commission to a new licensee. The new licensee, however, would be subject to the existing ITU “bring-into-use” date. The amount of time involved in such a re-assignment process makes it unlikely that any new licensee could meet the current ITU dates, thus, resulting in the loss of U.S. ITU coordination priority at these orbital locations.

committed to proceeding with implementation of its proposal. Because it is in the public interest to protect against warehousing of scarce spectrum resources and to ensure that scarce spectrum resources are being used efficiently, we strictly enforce these milestone requirements.²⁹⁶ Our strict enforcement policy will be employed in each Ka-band authorization milestone review – regardless of whether, in this case, the companies proceed as a new merged entity or separately – where a complete and full record can be developed to more appropriately and timely address these issues.

94. Finally, we address Opponents' arguments that the proposed merger should be denied because it would violate Sections 25.140 (e) and (f) of our rules. These rules place limits on the number of orbit locations that a qualified FSS applicant may be assigned initially for a new system and for expanding a previously licensed system using the same frequency bands.²⁹⁷ The rules were designed to avoid prematurely assigning an excessive number of orbit locations to an existing licensee for expansion of its domestic system, and to promote entry opportunity in the bands.²⁹⁸ In the first and second Ka-band processing rounds, the Commission determined that a waiver of these rules was in the public interest and would not undermine the policy objectives of the rules.²⁹⁹ In the first Ka-band processing round, the Commission waived application of the rules because it found that the applicants had agreed to an arrangement that accommodated all pending applications for space stations, and left room for additional assignments.³⁰⁰ In the second Ka-band processing round, the Commission determined that because the assignment plan it developed could accommodate all pending requests for space stations, with room for additional entry, it would again waive application of the rules.³⁰¹ Particular emphasis was placed on the benefits of not applying the rules in these initial assignments because application of the rules would have neither promoted geographic diversity nor increased the number of suppliers in the market.³⁰²

95. In our recent order to update and reflect revisions to the Ka-band assignment plan, we noted that a number of orbital locations remain available for additional entry by other Ka-band

²⁹⁶ *Morning Star Order*, n.292, *supra*.

²⁹⁷ See 47 C.F.R. § 25.140(e), (f).

²⁹⁸ The rule was originally adopted in 1983 based on a 1980 Orbit Assignment Order. In 1983, given the newness of the satellite industry, the Commission was concerned about allowing any one company to acquire too many satellite licenses in the absence of any demonstrated demand for satellite traffic. According to the Commission, "... two orbital locations were reasonable under the circumstances and more than sufficient to establish a reasonably competitive market presence when the satellite operator had little or no firmly demonstrated traffic commitments." *Rulemaking on the Licensing of Space Stations in the Domestic Fixed-Satellite Service and Related Revisions of Part 25 of the Rules and Regulations*, CC Docket No. 81-704, Report and Order, 54 RR 2d 577 (1983), See also *Licensing Space Stations in the Domestic Fixed-Satellite Service*, 50 Fed. Reg 36071 (Sept. 5, 1985).

²⁹⁹ Section 1.3 of the Commission rules provides that waivers may be granted when good cause is shown. See 47 C.F.R. § 1.3. According to criteria delineated by the Court of Appeals a waiver is appropriate only when it is found in light of special circumstances presented in the case at hand that granting such relief would not undermine the underlying purpose of the rule requirement in question and would better serve the public interest than insisting on strict compliance. See *WAIT Radio v. FCC*, 418 F.2d 1153, 1157 (D.C. Cir. 1969), *cert. denied*, 409 U.S. 1027 (1972); *Northeast Cellular Telephone Co., L.P. v. FCC*, 897 F.2d 1164, 1166 (D.C. Cir. 1990).

³⁰⁰ *Rulemaking to Amend parts 1, 2, 21, and 25 of the Commission's Rules to Redesignate the 27.5-29.5 GHz Frequency Band, to Reallocate the 29.5-30.0 GHz Frequency Band, to Establish Rules and Policies for Local Multipoint Distribution Service and for Fixed Satellite Services*, Third Report and Order, 12 FCC Rcd 22310, 22320 (1997) ("Ka-Band Rules Order").

³⁰¹ See *Ka-Band Assignment Orders*, n.28, *supra*.

³⁰² See *Id.* The International Bureau noted that impending ITU deadlines for operating satellites at the available Ka-band orbit locations would be difficult to meet if further processing rounds were required for assigning new applications to extra orbital locations.

applicants.³⁰³ The availability of sufficient orbital locations was one of the key facts that justified our waiver in the first and second Ka-band assignment rounds. We also note that there are a number of potential providers that have been assigned orbital locations capable of providing service to geographically dispersed areas. Thus, the circumstances that justified a waiver in the first and second Ka-processing rounds may also justify a waiver of the Sections 25.140(e) and (f) to accommodate this proposed transaction. As no request for waiver is before us at the present time, and in light of the procedural posture of this case, we make no conclusive determination under Sections 25.140 (e) and (f) at the present time.

96. In summary, we find that the proposed transaction is not consistent with this Commission's long-standing spectrum policies, the bulk of which have been aimed at creating competitive spectrum-based communications services within and among the voice, video and data services markets. We have consistently found that from the perspective of spectrum policy, the public interest is better served by the existence of a diversity of service providers wherever possible. Today we have such diversity in the DBS service, and Applicants have presented no compelling reason, from a spectrum policy standpoint, why we should approve license transfers that would effectively replace facilities-based intramodal DBS service competition with a monopoly on full-CONUS DBS licenses. This is particularly true given our assessment of the likely significant competitive harms the merger poses to the MVPD market. We will take account of this inconsistency with the Commission's pro-competitive spectrum policy in our balancing of the potential public interest harms and benefits of the proposed transaction.

V. POTENTIAL HARMS AND BENEFITS IN THE PROVISION OF MVPD AND BROADBAND SERVICES

97. In this section we analyze the potential harms and benefits of the proposed merger on competition in the relevant product markets that include DBS and satellite Internet access services. In general, competition depends on consumers having choices between products that are fairly good substitutes for each other. If consumers have such choices, a single provider cannot raise its prices above the "competitive" level because consumers will switch to a substitute. The level of competition depends on what products are substitutes (product market), where these substitute products are available (geographic market), what firms produce them (market participants), and what other firms might be able to produce substitutes if the price were to rise (market entry). To evaluate the impact of a merger on competition, we examine the characteristics of competition in the markets of the merging firms and determine the impact of the merger on these characteristics. Mergers raise competitive concerns when they reduce the availability of substitute choices (market concentration) to the point that the merged firm has a significant incentive and ability to engage in anticompetitive actions (such as raising prices or reducing output) either by itself, or in coordination with other firms. Economic theory describes both how such anticompetitive actions can harm consumers and how the magnitude of the harm can be measured.

98. In Section A, we review existing antitrust precedent concerning mergers that significantly increase concentration in relevant markets. The decisions suggest that a merger that reduces the number of competitors to two or one would generally be found to violate the antitrust laws, regardless of any potential benefits it might confer. Section B then considers the possible anticompetitive effects that might result from the proposed combination of EchoStar and DirecTV in the relevant market that includes DBS. We first perform a structural analysis considering the relevant product and geographic markets, identifying the market participants, and then examining various structural factors that affect the likelihood of competitive harms. Because our structural analysis suggests that the merger is likely to result in substantial anticompetitive effects, we next examine how the merger is likely to affect competitive

³⁰³ *See Id.*

behavior. We consider both whether the merger is likely to lessen competition through unilateral actions by the merged entity or through coordinated interaction among market participants. Section C addresses the potential benefits that may result from the merger, including possible cognizable efficiencies. We consider whether the Applicants have sufficiently documented their claimed efficiencies or whether they are merely speculative, and whether the cost savings will likely pass through to consumers. Finally, in Section D examines the Applicants' claims regarding potential benefits of the merger in the provision of satellite-based broadband services.

A. Relevant Antitrust Precedent

99. As discussed in greater detail below, this proposed transaction raises significant concern, because, for the vast majority of consumers, it would result in a reduction in the number of competitors from three to two or from two to one, depending on whether the consumer today has access to cable service. Such a drastic reduction in the number of competitors and concomitant increase in concentration create a strong presumption of significant anticompetitive effects.

100. As NAB observes, courts have generally condemned mergers that result in duopoly, and have been even more hostile to those that result in monopoly.³⁰⁴ In *FTC v. H.J. Heinz Co.*, for example, the United States Court of Appeals for the District of Columbia Circuit, reversing a district court's denial of the government's request for a preliminary injunction, rejected the district court's finding that the merger of the second and third largest firms in a three-firm baby-food market would increase the ability of the merged firm to compete with the number one firm.³⁰⁵ Noting the district court's finding that "there had been no significant entries in the baby-food market in decades and that new entry was 'difficult and improbable,'" the court of appeals stated that "[a]s far as we can determine, no court has ever approved a merger to duopoly under similar circumstances."³⁰⁶

101. In *FTC v. Staples*, the district court enjoined the merger of two competing office supply superstores where the merger would have left only one superstore competitor in 15 metropolitan areas and only two competing superstores in 27 other areas.³⁰⁷ Specifically noting the markets where the merger would result in monopoly, the court concluded that the "direct evidence shows that by eliminating Staples' most significant, and in many markets only, rival, this merger would allow Staples to increase prices or otherwise maintain prices at an anticompetitive level."³⁰⁸ Likewise, in *Franklin Electric Co.*, the district court enjoined a joint venture involving the only two domestic producers of submersible turbine pumps, where there were no foreign manufacturers with competitive products and numerous barriers to entry were present.³⁰⁹

102. Finally, where a merger is likely to result in a significant reduction in the number of competitors and a substantial increase in concentration, antitrust authorities generally require the parties to demonstrate that there exist countervailing, extraordinarily large, cognizable, and non-speculative efficiencies that are likely to result from the merger. For example, the *DOJ/FTC Merger Guidelines* state

³⁰⁴ NAB Petition at 64-70.

³⁰⁵ *FTC v. H.J. Heinz Co.*, 246 F.3d 708 (D.C. Cir. 2001).

³⁰⁶ *Id.* at 717.

³⁰⁷ *FTC v. Staples*, 970 F. Supp. 1066, 1081 (D.D.C. 1997)

³⁰⁸ *Id.* at 1082. See also *FTC v. Swedish Match*, 131 F. Supp. 2d 151 (D.D.C. 2000) (enjoining proposed merger of first and third largest producers of loose-leaf tobacco).

³⁰⁹ *United States v. Franklin Elec. Co.*, 130 F. Supp. 2d 1025 (W.D. Wis. 2000). Cf. IV PHILLIP E. AREEDA, HERBERT HOVENKAMP & JOHN L. SOLOW, ANTITRUST LAW ¶ 911 at 54-55 (Rev. ed. 1998) ("No merger threatens to injure competition more than one that immediately changes a market from competitive to monopolized.").

that “[w]hen the potential adverse competitive effect of a merger is likely to be particularly large, extraordinarily great cognizable efficiencies would be necessary to prevent the merger from being anticompetitive.”³¹⁰ The *Guidelines* go on to state that “[e]fficiencies almost never justify a merger to monopoly or near-monopoly.”³¹¹ Similarly, in the *Heinz* decision, the court of appeals stated:

[H]igh market concentration levels . . . require, in rebuttal, proof of extraordinary efficiencies. . . . Moreover, given the high concentration levels, the court must undertake a rigorous analysis of the kinds of efficiencies being urged by the parties in order to ensure that those ‘efficiencies’ represent more than mere speculation and promises about post-merger behavior.³¹²

103. More generally, Professors Areeda, Hovenkamp and Solow, in their authoritative antitrust treatise, observe that mergers that significantly increase concentration in already highly concentrated industries “should carry a strong presumption of illegality that can be defeated only by a showing of extraordinarily easy entry or truly extraordinary efficiencies. . . .”³¹³ Thus, existing antitrust doctrine suggests that a merger to duopoly or monopoly faces a strong presumption of illegality. Moreover, where a proposed merger would result in a significant increase in concentration in an already concentrated market, parties advocating the merger will be required to demonstrate that claimed efficiencies are particularly large, cognizable and non-speculative.

B. Potential Competitive Harms – MVPD Market

104. In this section, we examine the potential competitive effects of the merger in the relevant markets that include DBS services. We find, based on the record evidence, that there is a significant likelihood that the proposed merger will substantially increase concentration in an already concentrated market, substantially reduce competition and harm consumers.

1. Structural Factors Affecting Likelihood of Competitive Harms

105. Consistent with the *DOJ/FTC Guidelines* and Commission precedent, we first perform a structural analysis of the merger to examine if it would create conditions conducive to anticompetitive behavior.³¹⁴ We begin with an analysis of the relevant product and geographic markets. We next identify market participants, examine market concentration and how concentration will change as a result of the merger, and consider whether entry conditions are sufficiently easy that new competitors could likely defeat any attempted post-merger price increase.

a. The Relevant Product Market

106. Under our analytical framework and the principles established by the *DOJ/FTC Guidelines*, our first step in analyzing a proposed merger is to define the relevant product and geographic markets. The *Guidelines* define the relevant product market as the smallest group of competing products

³¹⁰ Horizontal Merger Guidelines, issued by the U.S. Department of Justice & Federal Trade Commission, April 2, 1992, revised April 8, 1997 (“*DOJ/FTC Guidelines*”). § 4.

³¹¹ *Id.*

³¹² *Heinz*, 246 F.3d at 720-21. See also *Swedish Match*, 131 F. Supp. 2d at 171 (finding, with respect to proposed merger of first and third largest manufacturers of loose-leaf tobacco, that the efficiency defense is “inappropriate in this particular case, in which the acquisition would generate undue market share and increase concentration”).

³¹³ IV AREEDA ¶932 at 160.

³¹⁴ Structural merger analysis, as the name suggests, considers structural characteristics of the merging firms and the relevant markets to make predictions about the likely competitive effects of a proposed merger.

for which a hypothetical monopoly provider of the products would profitably impose at least a “small but significant and non-transitory price increase,” presuming no change in the terms of sale of other products.³¹⁵ In other words, when one product is a reasonable substitute for the other in the eyes of consumers, it is to be included in the relevant product market even though the products themselves are not identical. Thus, the relevant product market includes “all products ‘reasonably interchangeable by consumers for the same purposes.’”³¹⁶

107. The parties in this proceeding disagree as to the exact boundaries of the relevant product market that includes DBS service, though all appear to agree that it includes video programming services provided by at least some identifiable subset of MVPDs. The Applicants submit that the relevant product market in this case is “no narrower than the MVPD market, and may be broader than that.”³¹⁷ The Applicants’ expert witness, Dr. Willig, states that the MVPD market includes cable and DBS services. In addition, Dr. Willig notes that other available MVPD services include home satellite dishes (“HSD” or “C-Band”), multichannel multipoint distribution service (“MMDS”), and private cable or satellite master antenna television (“SMATV”) systems.³¹⁸ Dr. Willig also asserts that the market in which DBS providers compete with cable operators may be expanding to include DSL providers, incumbent phone companies, and cellular phone providers, “as bundled packages with digital television, high speed Internet access, and video-on-demand become relatively more important in the MVPD market.”³¹⁹

108. Although some merger Opponents and others agree that the relevant product market is MVPD services,³²⁰ most contend that the relevant product market is narrower and includes only cable and DBS services.³²¹ Moreover, several distinguish between low-capacity and high-capacity cable services, and argue that only the latter is a viable substitute for DBS.³²² These merger Opponents assert that many low-capacity cable systems fail to offer the channel capacity, programming choices, and additional services, such as pay-per-view movies and interactive television, required to compete effectively with DBS.³²³ NRTC’s expert, Dr. MacAvoy, suggests that analog cable systems, which generally have fewer channels and poorer quality, do not “discipline the pricing of high-capacity cable and/or DBS service.”³²⁴ Moreover, others claim that more than 8,000 low-capacity cable systems, serving 8.2 million subscribers, primarily in rural areas, are at risk of business failure in the next five years,³²⁵ a risk that they claim will be greatly exacerbated by the proposed merger. NAB and Pegasus claim that SMATV and C-Band

³¹⁵ *DOJ/FTC Guidelines* §§ 1.11, 1.12.

³¹⁶ *United States v. E.I. du Pont de Nemours & Co.* 351 U.S. 377, 395 (1956) (The relevant product market is composed of products that have reasonable interchangeability); *see also United States v. Microsoft*, 253 F.3d 34, 52 (D.C. Cir. 2001), *cert. denied*, 122 S. Ct. 350 (2001) (in determining reasonable substitutes, the court excluded “middleware” software from the definition of the relevant product market because of its present non-interchangeability with Windows notwithstanding its long-term future potential).

³¹⁷ Application, Willig Decl. at 4.

³¹⁸ *Id.* at n.1.

³¹⁹ *Id.* at 10-11.

³²⁰ ACC Comments at 4; AAI Comments at 2.

³²¹ *Id.*; Circuit City Comments at 2; Intelsat Comments at 4 -5; Pegasus Petition at 14.

³²² *See, e.g.*, NRTC Petition at 20; Consumers Union Comments at 6-8. Frequently Commenters use the label “analog” to denote low capacity systems and “digital” to denote high capacity systems.

³²³ NRTC Petition at 20.

³²⁴ *Id.*, MacAvoy Decl. at 6.

³²⁵ *Id.* at 22. ACA Petition at 8-10. ACA suggests that New EchoStar will use its market power to eliminate independent cable competitors. *Id.*

should not be included in the relevant product market because the market shares of these services are declining, and because consumers do not perceive these services to be good substitutes for DBS.³²⁶

109. At the outset we recognize that, in the *Video Competition Report*,³²⁷ we have defined a relevant product market as “multichannel video programming service,” provided by MVPDs.³²⁸ While such a market definition may be appropriate in considering competitive services that are sufficiently substitutable so as to constrain the ability of cable companies to raise price,³²⁹ this market definition may not be appropriate for evaluating the competitive effects of a merger between two DBS providers. In particular, in defining the relevant product market for merger analysis, one starts with the products supplied by the merging firms and ask whether a monopolist, supplying those products, would profitably impose “a small but significant and non-transitory price increase.” If the monopolist would not be able to impose such a price increase, then one adds in the next closest substitute to the products of the merging firms and repeats the experiment.³³⁰ The relevant product that results from this procedure depends significantly on the products with which one started. Thus, since the *Video Competition Report* starts with cable services in defining the relevant product market, while in this proceeding, we must start with the products of the merging firms – *i.e.*, DBS service – it is entirely possible that we might derive different relevant product markets, given the different starting points. For example, customers of low capacity cable systems might find DBS service to be sufficiently attractive that they would switch from cable to DBS if the low capacity cable system attempted to raise its price. On the other hand, customers of DBS service might find the low capacity cable systems to be sufficiently inferior to DBS service that they would not switch to cable in response to a DBS price increase. Thus, while DBS would constrain price increases by low capacity cable systems, low capacity cable systems might not be able to constrain price increases by DBS providers.³³¹

110. The evidence in the record is sufficient for us to draw several conclusions. First, the evidence is clear that the relevant product market that includes DBS services involves differentiated products.³³² While all MVPDs transmit video programming networks to customers for a fee, there are clear, and significant, differences in the specific product characteristics of the service bundles offered by

³²⁶ NAB Petition, Sidak Decl. at 8 and Pegasus Petition, Rubinfeld Aff. at 9.

³²⁷ *Annual Assessment of the Status of Competition in the Market for the Delivery of Video Programming*, 17 FCC Record 1244 (2002) (“*Video Competition Report*”).

³²⁸ See, e.g., *Implementation of Section 19 of the Cable Television Consumer Protection and Competition Act of 1992*, First Report, 9 FCC Rcd 7442, 7467 (1994) (“For purposes of this Report, the relevant product market contemplated in the 1992 Act – multichannel video programming service – is the appropriate starting point for assessing the status of competition in the market for delivery of video programming. A primary focus of this Report, and a central concern of the 1992 Cable Act, is the extent to which MVPDs that use alternative technologies are emerging as significant competitors to cable operators.”).

³²⁹ See, e.g., *id.* at 7462 (For purposes of this Report, the Commission draws upon the relevant market concept in order to identify those distribution technologies that will potentially have a constraining effect on cable operator conduct.).

³³⁰ Gregory J. Werden, *The 1992 Merger Guidelines and the Ascent of the Hypothetical Monopolist Paradigm*, at <http://www.usdoj.gov/atr/hmerger/11256.htm> (visited Sept. 20, 2002). This approach has been referred to as the “smallest market principle.”

³³¹ Under this example, in evaluating a merger of two cable companies, DBS would be included within the relevant product market, but in evaluating the merger of two DBS providers, the relevant market would not include low capacity cable systems.

³³² Differentiated products are products whose characteristics differ and which are viewed as imperfect substitutes by consumers. See Dennis W. Carlton & Jeffrey M. Perloff, *MODERN INDUSTRIAL ORGANIZATION* 281 (2d ed. 1991).

different MVPDs and between service bundles offered by the same MVPD. This product differentiation, combined with the fact that EchoStar and DirecTV appear to be closer substitutes for each other than for services of cable systems or other MVPDs means that the unilateral incentive to raise prices after the merger is likely to be a significant problem.

111. Thus, although both cable and DBS operators typically offer several packages of services, some of which may include premium movie channels (*e.g.*, HBO and Cinemax) and pay-per-view movies, cable operators and DBS providers frequently differ in the specific characteristics of the service packages and in the total number of channels of programming that they offer. For example, EchoStar and DirecTV both have the capacity to offer as many as 300 channels, while many cable operators have much lower channel capacity, in some cases fewer than 30 channels.³³³ In this case, the proposed merger eliminates the closest competitor and so removes the most effective source of price discipline.

112. Second, the evidence in the record suggests that high-capacity cable systems are a closer substitute for DBS service than low-capacity cable systems.³³⁴ For example, staff analysis of churn data supplied by the Applicants indicates a statistically significant higher churn rates from DirecTV to EchoStar in areas with low-capacity cable systems compared to areas with high capacity cable systems.³³⁵ In addition DBS has significantly higher market penetration in areas served by low capacity cable systems than in areas served by high capacity cable systems.³³⁶ Again, this suggests that the merged entity is likely to have a greater incentive and ability to raise price after the merger in areas served by low-capacity cable systems than it would in areas served by high-capacity cable systems.

113. Third, as discussed in greater detail below, the evidence in the record strongly indicates that the services offered by the Applicants are closer substitutes to each other than are cable services offered by either high-capacity or low-capacity cable systems. Moreover, the evidence further suggests that each of the Applicants views the other as its closest rival.³³⁷

³³³ Seventy-two percent of cable systems have less than 53 channels. These low-capacity systems serve 24% of cable subscribers in the U.S. according to Warren Communications News' Data by Design.

³³⁴ There are alternative ways that one could distinguish between high-capacity and low-capacity cable systems. Some of the commenters distinguish between analog and digital systems, though their comments appear to focus on the number of channels and other services that can be provided over a particular cable system. Since digital cable systems do not necessarily have the capacity to offer more channels, we find that this is not the best way to distinguish low-capacity systems from high-capacity systems. Another way to distinguish low-capacity system from high-capacity systems is to classify cable systems based on the maximum number of video channels that they can offer. Under this approach one might define low-capacity systems as having a maximum capacity of less than 53 channels and a high capacity system as having a capacity of 53 or more channels. Unfortunately, the evidence in the record is not sufficient to determine which definitional approach is more meaningful economically or where to draw the line between low-capacity and high-capacity systems. This is one of the many issues that will have to be referred to, and resolved at, the hearing.

³³⁵ Letter from Applicants to Marlene Dortch, Secretary, FCC, Attachment ("churn1201data.zip"), transmitted by letter from the Applicants to Marlene Dortch (July 12, 2002) and Letter from Applicants to Marlene Dortch, Secretary, FCC, Attachment ("monthly_zip_code_data.zip"), transmitted by letter from Applicants to Marlene H. Dortch, Secretary, FCC (July 25, 2002).

³³⁶ In addition, analysis of the merger simulation model submitted by the Applicants suggests that low capacity cable systems do not pass the Merger Guidelines "smallest relevant market test."

³³⁷ **REDACTED.** In this Order, "**REDACTED**" indicates confidential or proprietary information, or analysis based on such information, submitted pursuant to the First and/or Second Protective Orders. See *EchoStar Communications Corporation, General Motors Corporation, and Hughes Electronics, Order Adopting Protective Order*, DA 02-27 (rel. Jan. 9, 2002); *EchoStar Communications Corporation, General Motors Corporation, and Hughes Electronics, Order Adopting Second Protective Order*, DA 02-964 (rel. Apr. 25, 2002). The unredacted version of this Order is available upon request only to those parties who have executed and filed with the

(continued...)

114. Although the record strongly suggests that the relevant product market is considerably more narrow than all MVPD services, we are unable to conclusively define the relevant product market at this time. To conclusively resolve this issue, we would need additional evidence, either in the form of econometric demand analyses or other evidence of substitutability. It is, however, necessary to adopt a tentative relevant product market in order to proceed with the structural analysis.

115. For purposes of this analysis, will adopt the Applicants' proposal of an MVPD product market. We recognize that this proposed market definition is the broadest of any proposed in the record, and because of this, it will tend to *minimize* any anticompetitive effects predicted by a structural analysis. Based on the evidence in the record, we find that the relevant product market that includes DBS is no broader than the entire MVPD market, but may well be narrower. In fact, the relevant product market may be limited to just DBS services, as EchoStar itself argued in its antitrust lawsuit against DirecTV.³³⁸ We refer to hearing the question whether the relevant product market is in fact all MVPD services, or is a smaller subset of MVPD services. For example, the administrative law judge will consider whether the relevant product market includes services provided by all cable companies, or just by high-capacity cable systems, or neither.

116. As noted, because we are tentatively adopting such a broad product market definition, our structural analysis may underestimate potential competitive harms.³³⁹ Nevertheless, even adopting the Applicants market definition, we find, as discussed below, that the structural characteristics suggest that the merger is likely to result in significant anticompetitive effects.

b. The Relevant Geographic Markets

117. DOJ identifies a relevant geographic market as the region where a hypothetical monopolist that is the only producer of the relevant product in the region would profitably impose at least a "small but significant and nontransitory" increase in the price of the relevant product, assuming that the prices of all products provided elsewhere do not change.³⁴⁰ This approach is consistent with the Supreme Court's definition of the relevant geographic market as the region "in which the seller operates, and to which the purchaser can practicably turn for supplies."³⁴¹

118. The Applicants contend that the relevant geographic market is national in scope, because both Applicants have national pricing plans for monthly subscription and programming fees.³⁴² Several merger Opponents and others disagree. They contend that the relevant market is local because the competitive alternatives available to consumers differ substantially across cable franchise areas. In

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Commission signed acknowledgements of the Second Protective Order. Qualified representatives, including those designated as parties to the hearing (*see* para. 297 *infra*) who have not yet signed the required acknowledgement may do so in order to obtain the unredacted Order.

³³⁸ Amended Complaint, *EchoStar Communications Corp. v. DirecTV Entertainment Corp.*, No. 00-I-212 (D. Colo. 2000).

³³⁹ Because market definition plays such a critical role in structural merger analysis, plaintiffs typically try to define the narrowest possible relevant markets, while defendants favor the broadest possible market. *See, e.g.*, Gregory J. Werden, *Simulating the Effects of Differentiated Products Mergers: A Practical Alternative to Structural Merger Policy*, 5 GEO. MASON L. REV. 363, 369 (1997)

³⁴⁰ DOJ/FTC Merger Guidelines § 1.21.

³⁴¹ *United States v. Grinnell Corp.*, 384 U.S. 563, 588-89 (1966); *see also* *FTC v. Elders Grain, Inc.*, 868 F.2d 901 (7th Cir. 1989).

³⁴² Application, Willig Decl. at 11.

particular, cable prices, service offerings, and installation charges vary across franchise areas.³⁴³ NAB identifies the Designated Market Area (“DMA”) as the relevant geographic market, on the ground that cable operators distribute programming through their local franchises and consumers can only receive programming from sources available in their local area.³⁴⁴ Pegasus and NRTC, in contrast, claim that the relevant geographic market is the local cable franchise area, because that is the area in which consumers have similar choices regarding a defined set of services.³⁴⁵

119. Consistent with past practice and the record before us, we conclude that the relevant geographic market for MVPD service is local.³⁴⁶ Although the Applicants offer service nationwide, consumers make decisions based on the MVPD choices available to them at their residences. Technically, the relevant geographic market, therefore, is the residence of each customer, since it would be prohibitively expensive for a customer to change his residence to avoid a “small but significant and nontransitory” increase in the price of MVPD service. Because it would be administratively impractical and inefficient to analyze a separate relevant geographic market for each individual customer, however, we will aggregate relevant geographic markets in which customers face similar competitive choices.³⁴⁷ Consistent with our precedents in this area, we thus conclude that the relevant geographic market should be presumed to be the franchise area of a local cable operator, since customers within that franchise area have the choice between the incumbent franchised cable company and the two DBS providers.³⁴⁸

120. To further simplify the analysis, it appears reasonable to aggregate relevant geographic markets that exhibit similar competitive conditions. In particular, we find it reasonable to classify

³⁴³ NAB Petition at 34-35, Pegasus Petition at 14; Duke Law Reply Comments at 12. In addition, NAB contends that the variation in EchoStar’s service offerings across local areas undermines its claim of a national geographic market. NAB Petition, Sidak Decl. at 10.

³⁴⁴ NAB Petition at 34, Sidak Decl. at 12.

³⁴⁵ Pegasus Petition at 14; Rubinfeld Decl. at 10; NRTC Petition, MacAvoy Decl. at 7, 9.

³⁴⁶ See, e.g., *AT&T-TCI Order*, 14 FCC Rcd at 3160, 3172; *Time Warner-AOL Order*, 16 FCC Rcd at 6553.

³⁴⁷ See *Bell Atlantic-NYNEX Order*, 12 FCC Rcd at 19985, *AT&T-MediaOne Order*, 15 FCC Rcd at 20016-17.

³⁴⁸ We recognize that competitive choices may not be identical throughout the franchise area. For instance, the local cable operator may not offer service to all households. Moreover, cable overbuilders and SMATV providers may offer service only to selected areas within the local cable franchise area. Thus, to be rigorous we would need to define a separate and narrower relevant geographic market wherever cable does not actually provide service, and a separate relevant geographic market wherever other MVPDs, such as overbuilders, do provide service. As a practical matter, however, we do not believe such precision is necessary for purposes of our analysis. In particular, we note that there are only approximately 64 cable systems that have overbuilders and 129 cable systems that have a wireless cable provider out of a total of 9667 cable systems. Warren Communications News, Inc., *Data-by-Design*. Moreover, even in the few cable franchise areas where there is an overbuilder, that overbuilder will generally not serve the entire cable franchise area. Thus, although overbuilders provide significant and effective competition to local cable operators in those areas in which they operate, the scope of their operations is geographically limited and likely to provide less competitive discipline on the prices of the DBS services, with their national footprint. See *Implementation of Section 3 of the Cable Television Consumer Protection and Competition Act of 1992, Statistical Report on Average Rates for Basic Service, Cable Programming Service, and Equipment*, 17 FCC Rcd (2002). See also, e.g., *Time Warner Entertainment-Advance/Newhouse Partnership, d/b/a Time Warner Company, Petition for Determination of Effective Competition in Conway, South Carolina (CUID No. SC0023)*, 15 FCC Rcd 9540 (CSB 2000); *Time Warner Cable, Petition for Determination of Effective Competition, Atlanta, Georgia*, 15 CC Rcd 10808 (CSB 2000); *Falcon Cable Systems Company II, L.P. d/b/a Charter Communications, Petition for Determination of Effective Competition in Various California Communities*, DA 02-2442 (MB, rel. Sept. 30, 2002); *Marcus Cable Associates, LLC d/b/a Charter Communications, Petition for Determination of Effective Competition in Various Wisconsin Communities*, DA 02-2424 (MB, rel. Sept. 30, 2002).

relevant geographic markets into three broad categories: (1) markets not served by any cable system; (2) markets served by a low-capacity cable system; and (3) markets served by high-capacity cable systems.³⁴⁹

121. As discussed below, the welfare effects on consumers may vary among the three categories of relevant geographic markets that we have identified. In particular, if the proposed merger appears likely to generate anticompetitive unilateral effects, the magnitude of those effects will increase, other things being equal, as the degree of substitutability between DBS and the incumbent cable company decreases in a particular relevant geographic market. Moreover, if the merged entity sets a single nationwide price, the price level it sets will depend not only on the elasticities of demand in the three types of markets, but also on the relative proportion of total households that each category represents.³⁵⁰ Thus, it is critical to determine the number of consumers, or households, that reside in each of the three relevant geographic markets.

122. Unfortunately, the evidence concerning the precise number of households that fall into each of the three categories is conflicting. For example, the Applicants and Opponents disagree on the total number of consumers that do not have access to cable service. The Applicants claim that over 96% of all television households in the United States are passed by cable.³⁵¹ In addition, they contend that the total number of homes not passed by cable is irrelevant because in the course of their business they cannot isolate homes not passed by cable for discriminatory treatment.³⁵²

123. Opponents, on the other hand, contend that the number of homes not passed by cable is relevant to the analysis of the likely competitive effects of the merger and that the Applicants underestimate the number of households not passed by cable. NAB cites DirecTV's internal data showing that three million, or 29%, of its approximately ten million subscribers have no access to cable.³⁵³ Assuming that a similar percentage of EchoStar's customers lack access to cable (approximately two million), NAB estimates that over five million DBS subscribers have no cable access.³⁵⁴ Citing data compiled by the Department of Commerce's National Telecommunications and Information Administration ("NTIA") and the Department of Agriculture's Rural Utilities Service, NRTC and

³⁴⁹ As discussed above, we find it reasonable to distinguish between low-capacity cable systems that offer relatively few channels and high capacity systems that offer many more channels, since we find that the latter are closer substitutes to DBS service than the former. We note that distinguishing between high-capacity and low capacity cable systems is consistent with the arguments of those commenters who contend that DBS faces significantly less competition from cable in areas served by analog cable systems than in areas served by digital cable systems. NRTC Petition at 20 (and MacAvoy Declaration at 6); Pegasus Petition at 19-20; Consumers Union Comments at 6-8, NAB Petition at 48. For example, NRTC's expert, Dr. MacAvoy, suggests that analog cable systems, which generally have fewer channels and poorer quality, do not "discipline the pricing of digital cable and/or DBS service." MacAvoy Decl. at 6. Similarly, NAB claims that New EchoStar will have the incentive and power to raise prices and reduce service quality in areas served by analog cable systems. NAB Petition at 58. In addition, as previously indicated, staff analysis of churn data submitted by the applicants show that there is a statistically significant difference in churn rates for cable systems having less than 53 channels and those having more than 53 channels, *see* Appendix E.

³⁵⁰ As the Applicants' expert, Dr. Willig, points out, the profit-maximizing uniform price-cost margin is inversely related to the weighted average own-price elasticity of demand, where the weights are the share of DBS customers in each market. Applicants' Reply Comments, Willig Declaration at 27.

³⁵¹ Application at 39.

³⁵² *Id.* at 60.

³⁵³ NAB Petition at 47.

³⁵⁴ *Id.*

NRECA claim that cable only passes approximately 81% of U.S. housing units, or alternatively that 23 million housing units are not passed by cable.³⁵⁵

124. Our estimate of the relative welfare losses resulting from the proposed merger depends on the relative percentage of households in each of the three categories of markets, since the incentive and ability of the merged firm to raise price after the merger is likely to vary among the three areas. Unfortunately, we find that the evidence in the record is inadequate to develop a reliable estimate of the number of homes that do not have access to cable. More specifically, Warren Communications, which publishes data on the number of homes passed by cable, does not clearly define what it means by “homes passed by cable.” Accordingly, it is not clear what data should be used to develop an estimate of “total homes.” Depending on the data set used to estimate total homes, the number of homes not passed by cable may vary from the 4% claimed by the Applicants to 21.28%.³⁵⁶ Thus, the issue of the number of households not passed by cable will have to be determined at hearing.

125. In summary, we conclude that the relevant geographic market is local, and that it is reasonable to aggregate the relevant geographic markets into three broad categories of (1) markets not served by and cable operator; (2) markets served by low-capacity cable systems; and (3) markets served by high-capacity cable systems. We refer to hearing the issue of the number of households in each of the three categories of relevant geographic markets.

c. Market Participants

126. Next we identify market participants in the relevant markets. We include as market participants not only the firms that currently participate in the relevant markets,³⁵⁷ but also any “uncommitted entrants” (i.e., firms that are likely to enter the relevant markets “within one year and without expending significant sunk costs of entry and exit in response to a small but significant and non-transitory increase in price.”)³⁵⁸

127. As discussed below, the record indicates that the primary providers of MVPD services in the vast majority of relevant local markets are the two DBS operators and cable operators. As previously indicated the Applicants, who are the two primary providers of DBS service, each provide service nationwide. In the vast majority of areas in which cable service is available, there is a single, franchised cable provider. Thus, in areas where cable is available, the three main competitors are the franchised

³⁵⁵ NRTC Petition. at 8-14; NRECA Comments at 4-5.

³⁵⁶As NAB and NRTC point out, there are three different measures that could be used in developing an estimate of the total number of U.S. homes: (1) housing units (as defined by the Census); (2) occupied housing units (or households) (again as defined by the Census); and (3) television households (as defined by the A.C. Nielsen Company). Unfortunately, these three measures yield widely different estimates for the number of homes that do not have access to cable. The differences in resulting estimates can be seen as follows. Warren Communications News’ TELEVISION AND CABLE FACTBOOK reports that, as of year-end 2001, cable systems passed approximately 90,772,025 homes. According to Census 2000 data, there were approximately 115,904,641 *housing units* in the United States in the year 2000, and approximately 105,480,101 *occupied housing units*, or households, *see* U.S. CENSUS BUREAU, U.S. SUMMARY 2000 2 (July 2002). When measured against the Warren data on homes passed, we find that approximately 24,668,135 *housing units*, or 21.28%, are not passed by cable, and approximately 13,789,834 *occupied housing units*, or 13.07%, are not passed by cable. Finally, A.C. Nielsen Company reports that there were approximately 102,184,810 *television households* as of year-end 2001. Compared to cable homes passed, approximately 10,075,153 television households, or 9.86%, are not passed by cable. Thus, by these measures, the number of homes not passed by cable can vary from 9.86% to 21.28% depending on the data used in the comparison.

³⁵⁷ DOJ/FTC Guidelines §1.3

³⁵⁸ *Id.* §1.32. We will discuss “committed entrants,” also known as “potential entrants,” *infra*.

cable provider and the two DBS operators, while in areas where cable is unavailable, the only two major competitors are the Applicants themselves.

128. We recognize that there are other, smaller DBS providers, such as NRTC members (including Pegasus), which have exclusive agreements to resell DirecTV service within their service territories, and Dominion Video Satellite, Inc., which is a licensee of eight transponders at 61.5° W.L. Currently, Dominion leases six of its transponders to EchoStar and has an agreement to lease satellite capacity from EchoStar to transmit religious programming to customers. We do not find these providers would exert a significant competitive constraint on the merged entity. NRTC members do not pose a significant competitive threat because they act as resellers of DirecTV's programming and therefore are unlikely to exert any significant price discipline on the merged entity, at least in the longer run. Moreover, NRTC argues that the merged entity will have the incentive to terminate the existing contract. Dominion, on the other hand, does not appear to pose a significant threat because it is not a facilities-based competitor, at this time, and only offers special interest programming.

129. In addition, under the Applicants' proposed market definition, which we have tentatively adopted, other MVPD providers, including MMDS, SMATV, open video systems, direct-to-home analog and digital satellite offerings, and cable overbuilders would also be included as market participants.³⁵⁹ We agree with the Applicants that these other MVPD providers offer multichannel video programming services. We further agree that these other MVPDs compete in at least some relevant geographic markets. At the same time, however, it is not certain whether the services offered by these MVPDs will ultimately be found to fall within the relevant market that includes DBS service.

130. More importantly, the record suggests that, even if these MVPDs provide services that fall within the relevant product market, these other MVPDs are not a significant competitive presence in the vast majority of relevant geographic markets. The majority of these other MVPD providers serve only a relatively few local geographic areas and have little or no impact on relevant customer alternatives in the majority of markets. For example, in a limited number of franchise areas, an overbuilder or MMDS operator also offers service. Overbuilders offer service only in limited areas, however, and the growth of overbuilding has slowed substantially in recent years.³⁶⁰ Similarly, MMDS operators also offer service only in limited areas. Furthermore, many MMDS license holders have shifted focus toward providing data transmission services rather than video services.³⁶¹ SMATV providers, which can offer service in any setting in which a public right-of-way is not crossed, tend to focus on providing service to high-density multi-dwelling units, and generally do not provide competition throughout a local franchise area.³⁶² Finally, although C-Band operators provide service in most geographic regions, several factors prevent the service from imposing significant competitive discipline on DBS. Most notably, C-Band service requires the purchase of expensive equipment and the placement of a large satellite dish that takes up a significant amount of space.³⁶³ These relative competitive disadvantages of C-Band service appear to be reflected in the fact that C-Band subscribership has dropped steadily in recent years, and now stands at less than one million homes.³⁶⁴ C-Band, therefore, is unlikely to exert significant competitive discipline on DBS pricing.

³⁵⁹ *Id.* at 40; Application, Willig Decl. at 10-11.

³⁶⁰ *Video Competition Report*, 17 FCC Rcd at 1294-1297.

³⁶¹ *Id.* at 1277-79.

³⁶² *Id.* at 1279-81.

³⁶³ *See also EchoStar v. DirecTV*, Amended Complaint ¶ 30, where EchoStar asserts that C-band technology is largely obsolete.

³⁶⁴ *Video Competition Report*, 17 FCC Rcd at 1277.

131. Because of this, we find that these alternative MVPDs are limited, either technically or in terms of geographic footprint, and accordingly conclude that these other MVPDs impose little competitive constraint on DBS operators. Given this, we believe it is reasonable, in our preliminary competitive analysis, to focus primarily on the impact of the merger on competition between cable operators and DBS providers, as have the Applicants and the merger Opponents.

132. Finally, there is no evidence in the record that suggests that there are other firms that would likely to enter the market within one year and without expenditure of significant sunk costs in response to a “small but significant and nontransitory” price increase, and that would therefore qualify as uncommitted entrants. Rather, it appears that, for new entry to occur, prospective entrants would have to incur significant sunk costs and would not be able to enter within the twelve month period indicated in the *DOJ/FTC Guidelines*.³⁶⁵ Thus, we do not find any “uncommitted entrants” that should be counted as market participants.³⁶⁶

d. Market Shares and Concentration

133. Having adopted a provisional definition of the relevant markets and identified current market participants, we next consider whether there is a substantial likelihood that the merger will result in anticompetitive effects, such as higher prices, lower quality, or reduced incentives for innovation. Following the *DOJ/FTC Guidelines*, as well as antitrust and Commission precedent, we first examine the post-merger market concentration and the change in market concentration that is likely to result from the merger,³⁶⁷ since concentration in the relevant markets is one indicator of the likely competitive effects of a proposed merger.

134. Under the *DOJ/FTC Guidelines*, a market with a Herfindahl Hirschman Index (“HHI”)³⁶⁸ that exceeds 1800 is considered highly concentrated. Moreover, where the post-merger HHI exceeds 1800, and the merger produces an increase in the HHI of more than 100 points, the *Guidelines* presume that the merger is “likely to create or enhance market power or facilitate its exercise.”³⁶⁹

³⁶⁵ *DOJ/FTC Guidelines* § 1.32.

³⁶⁶ Cablevision is in the process of constructing a DBS satellite, “Rainbow 1 DBS,” that it intends to launch in March 2003, and plans to begin service no later than December 31, 2003. Therefore we consider Rainbow DBS in the discussion of committed or potential entrants below.

³⁶⁷ See, e.g., *Id.* § 1.51 (“In evaluating horizontal mergers, the Agency will consider both the post-merger market concentration and the increase in concentration resulting from the merger.”); *Coastal Fuels of P.R., Inc. v. Caribbean Petroleum Corp.*, 79 F.3d 182, 196-97 (1st Cir. 1996) (“monopoly power” “may be proved circumstantially by showing that the defendant has a dominant share in a well-defined relevant market and that there are significant barriers to entry in that market.”); *Application of WorldCom, Inc. and MCI Communications Corp. for Transfer of Control of MCI Communications Corp. to WorldCom, Inc.*, 13 FCC Rcd at 18048 (“We begin our analysis of the competitive effects of the merger by assessing both the current market concentration and the likely increase in market concentration resulting from the merger...”).

³⁶⁸ The Herfindahl-Hirschman Index is calculated as the sum of the squares of the market shares of each firm participating in a relevant market. The HHI can range from nearly zero in the case of an atomistic market to 10,000 in the case of a pure monopoly. Because the HHI is based on the squares of the market shares of the participants, it gives proportionately greater weight to carriers with larger market shares. Changes in market concentration are measured by the change in the HHI. See *DOJ/FTC Guidelines*, § 1.5.

³⁶⁹ *Id.* at § 1.51.

135. The Applicants claim that the post-merger HHI for MVPD industry is below 1000 and so well below the safe harbor threshold specified in the *DOJ/FTC Guidelines*.³⁷⁰ Their analysis is fatally flawed, however. In particular, as discussed above, the Applicants define the geographic market as a national market, and in their HHI calculations they attribute a separate national market share to each cable operator. This HHI calculation is meaningless. It presumes, for example, that a Charter customer in Pasadena, California, could switch service to Cablevision in New York without moving his household.

136. Commission staff calculated HHIs for a sample of 4,984 relevant geographic markets using data submitted by the Applicants.³⁷¹ We note that the Applicants' disaggregated data only includes incumbent cable providers and the two DBS providers, and does not take into account other MVPDs, such as overbuilders and C-Band providers. We do not believe that the lack of data on these other MVPDs causes a significant distortion, however, because their market shares are so small.³⁷² We also note in this regard that, although the Applicants have argued that the relevant product market includes all MVPD services, in their merger simulation analysis they examine only competition between the cable and DBS products. This appears to indicate that, when it comes to analyzing the likely competitive impacts, the Applicants acknowledge that cable systems and DBS providers are the only significant market participants.

137. The Commission staff analysis shows that the *mean* post-merger HHI for all markets to be 6043 and the *mean* increase in HHI to be 1163. The analysis also yields a *median* post-merger HHI for all markets of 5653, and a *median* increase in HHI of 861.

138. Commission staff also calculated the mean and median post merger HHIs and increase in HHIs for markets with high-capacity cable systems, with low-capacity cable systems,³⁷³ and with no cable system. For markets with high-capacity cable systems, the staff analysis shows the *mean* post-merger HHI be 6704 and the mean increase to be 450, while the *median* post-merger HHI is 6693 and *median* HHI increase is 206.³⁷⁴ For markets with low-capacity cable systems, the staff analysis shows the *mean* post-merger HHI be 5938 and the mean increase to be 1276, while the *median* post-merger HHI is 5556 and *median* HHI increase is 1003.³⁷⁵ Finally, using a different data set, staff calculated HHIs for areas not

³⁷⁰ Letter from Applicants to Marlene Dortch, Secretary, FCC, Attachment ("Analysis of the EchoStar-Hughes Merger: Competitive Effects and National Pricing"), transmitted by letter from the Applicants to Marlene Dortch (June 27, 2002) at 18-19.

³⁷¹ Letter from Applicants to Marlene Dortch, Secretary, FCC, Attachment ("3_year_mvdp_data.dta"), transmitted by letter from Applicants to Marlene H. Dortch, Secretary, FCC (July 25, 2002) and Letter from Applicants to Marlene Dortch, Secretary, FCC, Attachments ("3_year_mvdp_data_prep.do" and "logit_regressions.do"), transmitted by letter from Applicants to Marlene H. Dortch, Secretary, FCC (July 12, 2002). The Applicants' data were submitted as part of their simulation analysis, which calculated the impact of cable prices on MVPD market shares. These data specified the relative market shares for cable, over-the-air television, and each of the two DBS operators for 4,984 "local cable systems." Because we concluded that over-the-air television was not in the relevant product market, staff excluded over-the-air customers from the HHI calculation.

³⁷² According to the *Video Competition Report*, cable systems and DBS providers accounted for 96.3% of all MVPD subscribers. This indicates that other MVPDs currently do not constitute a significant competitive force.

³⁷³ The staff analysis defined a low-capacity cable system as one offering less than 53 channels of video programming and a high-capacity system as one offering at least 53 channels.

³⁷⁴ The staff also ran the analysis using weights supplied by the Applicants. Using these weights generated a *mean* post-merger HHI of 7391 and *mean* HHI increase of 194, while the *median* post-merger HHI was 7502 and the *median* HHI increase was 101 in markets with high capacity cable systems.

³⁷⁵ The analysis using weights supplied by the Applicants yielded a *mean* post-merger HHI of 6661 and *mean* HHI increase of 675, while the *median* post-merger HHI was 6522 and the *median* HHI increase was 280 in markets with low capacity cable systems.

served by cable. The analysis naturally generated a post-merger HHI of 10,000 (since the two DBS firms are the only firms in the market) and a HHI increase of **REDACTED**.

139. Thus, as this analysis indicates, the proposed transaction will increase concentration significantly in a market that is already highly concentrated. In fact, all the estimates exceed the threshold specified in the *DOJ/FTC Guidelines*, where mergers are “presumed . . . to create or enhance market power or facilitate its exercise.”³⁷⁶

e. Barriers to Entry

140. As the *Guidelines* indicate, the level of concentration and the change in the level of concentration are not the only factors that can affect the competitive significance of a merger. Thus, where market share and concentration data suggest that a particular transaction is likely to have anticompetitive effects, we then examine other structural factors that may affect the likely magnitude of any competitive effect, including in particular, entry conditions. If entry is sufficiently easy, new entrants will likely render unprofitable any attempted post-merger price increase. The *Guidelines* explain that entry is sufficiently easy to deter post-merger price increases “if entry would be timely, likely, and sufficient in magnitude, character, and scope to deter or counteract the competitive effects of concern.”³⁷⁷ The *Guidelines* explain that entry will be considered “timely” only if it “can be achieved within *two years* from initial planning to significant market impact.”³⁷⁸ The record in this proceeding suggests, however, that barriers to entry into the relevant market are high and that additional competitors are unlikely to be able to enter within two years in response to an attempted price increase by the merged entity.

141. Applicants contend that new entry is possible into this market. They argue that there are several orbital locations allotted by the ITU that could be used for domestic DBS service.³⁷⁹ In addition, they claim that it is technologically feasible for entry to occur through various terrestrial platforms, including multichannel video distribution and data service (“MVDDS”).³⁸⁰

142. While entry may be possible, we find that there appear to be several significant barriers to timely competitive entry in the MVPD market, which makes it unlikely that any new competitor could enter and achieve a significant market presence within two years following the merger. For potential entrants that seek to provide video services via satellite, there are two major barriers to entry. First and foremost, there is a limited amount of spectrum that is both available and suitable for the provision of satellite-delivered video services.³⁸¹ Currently, there are only two potential entrants that possess licenses that could be used to provide competing DBS service, R/L DBS Company, LLC (“Rainbow DBS”), a wholly-owned subsidiary of Rainbow Media Holdings, Inc., which in turn is controlled by Cablevision

³⁷⁶ The *DOJ/FTC Guidelines* specify that mergers that produce a post-merger HHI above 1800 and an increase in the HHI of greater than 100 points will be presumed to have an anticompetitive effect. *Id.* at § 1.51.

³⁷⁷ *Id.* § 3.0.

³⁷⁸ *Id.* § 3.2.

³⁷⁹ Applicants Reply Comments at 49.

³⁸⁰ *Id.* at 53. In the Matter of Amendment of Parts 2 and 25 of the Commission's Rules to Permit Operation of NGSO FSS Systems Co Frequency with GSO and Terrestrial Systems in the Ku Band Frequency Range; Amendment of the Commission's Rules to Authorize Subsidiary Terrestrial Use of the 12.2 12.7 GHz Band by Direct Broadcast Satellite Licensees and Their Affiliates; and Applications of Broadwave USA, PDC Broadband Corporation, and Satellite Receivers, Ltd. to Provide A Fixed Service in the 12.2 12.7 GHz Band, 17 FCC Rcd 9614 (2002).

³⁸¹ EchoStar appeared to agree with this view when, in its antitrust complaint against DirecTV, it alleged that “[e]ntry into the high-power DBS market is fundamentally constrained by the small number of orbital slots.” *EchoStar Communications Corp. v. DirecTV Entertainment Corp.*, Amended Complaint ¶ 81.

Systems Corporation (“Cablevision”), a major cable multiple system operator (“MSO”), and SES Americom. Second, there are no additional full-CONUS slots available for the provision of high-power DBS service.

143. Pursuant to the *DOJ/FTC Guideline* test of whether entry is sufficiently easy, we consider whether “entry would be timely, likely, and sufficient in magnitude, character, and scope to deter or counteract the competitive effects of concern” and likely to occur within two years.³⁸² Of the two potential entrants with satellite licenses, Rainbow DBS currently has licenses for 11 DBS transponders at 61.5° W.L.³⁸³ Cablevision states that Rainbow DBS is in the process of constructing a DBS satellite, “Rainbow 1 DBS,” and that it intends to launch Rainbow 1 DBS in March 2003 and initiate service in December, 2003.³⁸⁴ Nonetheless, based on the record before us, we cannot include Rainbow DBS within the category of potential entrants for purposes of our competitive analysis. Even if Rainbow 1 DBS is successfully launched on schedule, it is highly unlikely that the operator could roll-out this new service and acquire a significant customer base sufficient to off-set the likely competitive harms of the proposed merger within two years. There are simply too many uncertainties associated with the launch of a new satellite, operation of associated ground facilities, acquisition of distribution agreements with local equipment retailers and installers, and deployment of a new DBS service to assume that Rainbow DBS could have a significant competitive impact within the relevant two-year timeframe. This may be particularly true under today’s difficult market conditions.

144. The second potential entrant, SES Americom, filed an application on April 25, 2002, to provide service in the United States using a satellite licensed by Gibraltar at the 105.5° W.L. orbit location, which is currently pending.³⁸⁵ SES Americom plans to offer satellite capacity on a wholesale basis for third party direct-to-home services to consumers in the United States. Specifically, SES Americom proposes to operate a DBS system at 105.5° W.L. (12.2-12.7 GHz bands 17.3-17.7 GHz feeder links), using an open platform approach (which is used by its affiliate, Astra, in Europe). SES Americom currently holds an FCC license for the 105° W.L. orbit location in both the Ku and Ka-bands. The 105.5° W.L. location is, however, only 4.5° away from each of two U.S. DBS orbital locations – 101° W.L. and 110° W.L. The Commission has never licensed DBS satellites less than 9° apart before. EchoStar and DirecTV are opposing the SES Americom proposal because of potential interference concerns. In response to a request from the Radiocommunications Agency of the United Kingdom, we accepted a

³⁸² *DOJ/FTC Guidelines* §§ 3.0, 3.2.

³⁸³ As a condition to the merger, Cablevision requests that EchoStar transfer 17 transponders from the 61.5° W.L. in order to provide effective competition to New EchoStar. Cablevision also requests that the Commission require EchoStar to lease capacity on its EchoStar-3 satellite to Cablevision for not less than three years. See Letter from Benjamin J. Griffin, Counsel for Cablevision and R/L DBS Co., to Marlene H. Dortch, Secretary, FCC, (July 11, 2002) (Cablevision July 11 *ex parte*).

³⁸⁴ See Cablevision Sept. 18 *ex parte*; Application of R/L DBS Company, LLC for Modification of Direct Broadcast Satellite Authorization to Launch and Operate its DBS Satellite, Rainbow 1, at 61.5° W.L., File No. SAT-MOD-20020408-00062, DBS8701. Cablevision states that the new satellite would use 13 transponders at the 61.5° W.L., including the 11 transponders licensed to Cablevision and two “unallocated” transponders. It states that it will allocate transponders to either spot beams (regional programming) or CONUS beams (national programming) and, using a 21 spot-beam configuration, could reach 143 DMAs. Cablevision asserts that this new satellite system will employ the latest and most efficient technologies, including advanced compression, set-top boxes, and allocation of frequencies for either spot-beams or CONUS beams. *Id.* at 5-7. Cablevision sets forth a table showing programming configuration options with 8PSK modulation and MPEG-2 and MPEG-4 compression. Cablevision has also requested, as a condition of our approval of the proposed transaction, that we order the divestiture of 17 DBS channels at 61.5° W.L. so that Rainbow DBS could provide an enhanced DBS product from its satellite located in this partial-CONUS slot. See Letter from Howard J. Symons, Mintz Levin on behalf of Cablevision and R/L DBS Company to Marlene H. Dortch, Secretary, FCC (Sept. 12, 2002).

³⁸⁵ File no. SAT-PDR-20020425-00071.

proposal to permit operator to operator negotiations on these issues.³⁸⁶ SES Americom reports that as of August 2002 neither EchoStar nor DirecTV has met with it for the required technical discussions.³⁸⁷ Even assuming that negotiations commence in a timely manner, it appears unlikely that SES Americom, EchoStar, and DirecTV will have resolved all technical issues, and that SES Americom will have received regulatory approval, launched a satellite and have had a significant market impact on the retail MVPD market within two years.

145. Compass Systems, Inc., a company 100% owned by Northpoint Technologies, Ltd., has filed an application for a construction permit for a DBS system and for authorization for a terrestrial platform in the DBS frequencies (“SouthPoint Application”).³⁸⁸ The SouthPoint Application has four parts: (1) an application for authority to construct a DBS system; (2) a request for the Commission to exercise its discretion to grant immediately an “interim assignment” of 32 DBS channels at each of the two vacant U.S. DBS positions of 166° W.L. and 157° W.L. for the applicant’s proposed DBS satellites; (3) a request for immediate authorization of a multichannel video and broadband service through an “integrated terrestrial platform” located on the ground in the United States; and (4) a discussion of future plans for providing DBS service to the United States, Canada, and Mexico and for providing FSS to other nations.³⁸⁹ To date, we have not yet taken action on this application. Thus, similar to the situation with respect to SES Americom, it is also unlikely that Compass Systems could resolve all outstanding regulatory issues, launch a DBS system, construct its proposed terrestrial platform and have a significant market impact within two years.

146. WSNET Holdings, Inc. (“WSNet”) does not currently hold an FCC license, but has filed an application for a transmit/receive earth station in Cohoes, New York, near Albany.³⁹⁰ WSNET proposes to uplink programming from the earth station in New York to two Canadian DBS satellites located at 91°W.L. and 82° W.L. for distribution to the million customer premises receiving terminals in the U.S. Because this application has yet to be approved, the competitive entry and impact of WSNET in the MVPD market is also unlikely to occur within the relevant timeframe.

147. For the reasons stated above, we find that none of these potential entrants utilizing satellite-based technologies are likely to be able to enter the domestic retail MVPD market and achieve a significant market impact within two years.

148. A second class of potential entrants consists of cable overbuilders. Currently, overbuilders have a small market share with one million customers nationwide and a presence in franchise areas that cover only 17 million homes. A potential wireline MVPD entrant, such as a cable overbuilder, faces several major barriers to entry. First, an overbuilder would have to make a significant up-front investment in order to deploy its network, before it could begin acquiring a significant market

³⁸⁶ Letter form Pat Strachan, UK RA to Thomas Tycz, FCC (May 7, 2002), and letter form Kathryn O’Brien, FCC to Pat Strachan, UK RA (June 28, 2002).

³⁸⁷ See *SES AMERICOM Inc. Petition for Declaratory Ruling SAT-PDR-20020425-00071*, August 23 2002, at ¶2.

³⁸⁸ See Application of Compass Systems, Inc. for Authority to Construct an International Direct Broadcast Satellite System (filed March 20, 2002).

³⁸⁹ The applicant discusses other operations but these operations are not covered by the application and are not before the Commission at this time. For instance, the applicant indicates that the spacecraft at 166° W.L. will provide service to Alaska, Hawaii, and the Continental United States (CONUS) except for the East Coast, using the 32 DBS channels at this position. The applicant also indicates that a steerable beam using FSS frequencies will be included for potential coverage of a selected area in the Eastern Pacific. The applicant indicates that the spacecraft at 157° W.L. will provide service to Canada, Mexico, and the CONUS except for the East Coast using the 32 DBS channels at this position.

³⁹⁰ File nos. SES-LIC-20011121-02186 and SES-LIC-20020111-00075.

presence. In the current financial markets, finding funding to support these sunk investments has become increasingly problematic. Indeed, existing overbuilders have been scaling back their plans to enter markets rather than accelerating them.³⁹¹ Second, the incremental costs of serving a new customer are likely to be higher for an overbuilder than they would be for a satellite provider.³⁹² Third, it generally takes a significant amount of time to enter a local market through construction of a new wireline MVPD system over public rights-of-way due to the need to satisfy local permitting, franchising and other requirements.

149. Finally, with respect to terrestrial MVDDS providers, we note that petitions for reconsideration of our spectrum allocation and service rules are pending. In addition, the Commission plans to assign licenses by auction, and the licensees will have flexibility as to the specific services they may offer. Consequently, it appears unlikely that any MVDDS licensee will be able to enter the MVPD market and achieve a significant market impact within two years.

150. It, therefore, appears that the proposed merger will not only significantly increase concentration in a market that is already highly concentrated, but that potential entry that could defeat any attempt by the merged entity to raise prices is unlikely. Thus, under traditional structural antitrust analysis, there appears to be a substantial likelihood that the proposed merger will significantly increase concentration in an already concentrated MVPD market, that barriers to entry into this market are high, and that proposed merger will therefore have a significant adverse effect on competition.

2. Analysis of Potential Adverse Effects on Competitive Behavior.

151. Because the foregoing structural analysis suggests that the merger is likely to have an adverse effect on competition, it is necessary to examine in more detail whether, and how, the merger may affect competitive behavior. As the *DOJ/FTC Guidelines* make clear, competition may be harmed either through unilateral actions by the merged entity or through coordinated interaction among firms competing in the relevant market.³⁹³

152. Unilateral effects arise when the merging firm finds it profitable to alter its behavior following the merger. Examples of unilateral effects include a merging firm's raising its price or reducing the quantity it supplies.³⁹⁴ Coordinated effects, in contrast, arise when competing firms, recognizing their interdependence, take actions "that are profitable for each of them only as a result of the accommodating reactions of others."³⁹⁵ Because coordinated effects generally are more likely the smaller the number of firms in a market, mergers may significantly increase the likelihood of coordinated effects by reducing the number of firms. Examples include explicit collusion, tacit collusion, and price leadership. We will discuss each of these in turn.

³⁹¹ For example RCN, a leading cable overbuilder, reported to the SEC that "As a response to the severe slowdown in the telecommunication's industry and economy, the limited available capital resources for our industry,...we revised our growth plan accordingly during the second quarter 2002....Under the revised plan, the Company has substantially curtailed future capital spending and network geographic expansion in all existing markets, focuses on continuation of customer acquisition growth and has reduced operating expenses." RCN Corp "*Quarterly Report (SEC form 10-Q)*" August 14, 2002 at 24.

³⁹² For a satellite provider, the incremental cost of an additional customer is the cost of the dish and set-top box. In contrast, the incremental cost of an additional customer for an overbuilder, entering a new area would involve deploying MVPD facilities to residential areas, which could be significant.

³⁹³ *DOJ/FTC Guidelines* § 2.

³⁹⁴ *Id.* at § 2.2.

³⁹⁵ *Id.* at § 2.1.

a. Unilateral Effects

153. It is generally recognized that, as a result of a merger, the merging firms “may find it profitable to alter their behavior unilaterally . . . by elevating price and suppressing output.”³⁹⁶ A merger may lead to particularly strong increases in the merged firm’s ability to affect market performance unilaterally when the merging firms compete in a differentiated products market, and the firms’ products are close substitutes for each other. “A merger between firms in a market for differentiated products may diminish competition by enabling the merged firm to profit by unilaterally raising the price of one or both products above the pre-merger level. . . . The price rise will be greater the more the buyers of one product consider the other product to be their next choice.”³⁹⁷ Therefore, if the services offered by EchoStar and DirecTV are viewed as close substitutes by significant numbers of customers, the merger of the two firms can remove the strongest constraint on the acquiring firm’s ability to raise prices. Similarly, if high-capacity cable systems are viewed as a closer substitute for DBS than low-capacity cable systems, then the merged entity will have an incentive to raise price more in areas that are served by low-capacity systems.

154. The Applicants and Opponents disagree concerning the relative substitutability between EchoStar service and DirecTV service on the one hand, and between DBS service and cable service on the other. There is also conflicting evidence as to the relative substitutability of low-capacity cable systems and DBS compared with high-capacity cable systems and DBS. Although the Applicants concede that the two DBS companies compete to some extent, they contend that “this competition is dwarfed in comparison to DBS competition with cable.”³⁹⁸ The Applicants’ expert, Dr. Willig, argues, for example, that EchoStar and DirecTV do not compete intensely against each other, and so their merger is unlikely to produce any substantial increase in DBS prices.³⁹⁹ Dr. Willig further claims that the primary objective of EchoStar and DirecTV is to gain market share by luring consumers away from the leading cable providers and not from each other. Thus, according to Dr. Willig, both firms price their DBS programming services at levels based primarily on the prices charged by cable providers.⁴⁰⁰ Dr. Willig also contends that, while EchoStar and DirecTV each monitor the pricing of the other firm, DBS pricing plays little (if any) role in their own pricing decisions.⁴⁰¹ Dr. Willig also suggests that a unilateral price increase by New EchoStar is unlikely because the merger would reduce New EchoStar’s marginal cost, in part by reducing its per-subscriber programming costs.⁴⁰²

155. Opponents challenge the Applicants’ claim that EchoStar and DirecTV do not compete vigorously with each other. NRTC, Pegasus and NAB submit evidence that EchoStar and DirecTV are currently each other’s closest competitors and that loss of intra-DBS competition would have substantial detrimental effects on consumers.⁴⁰³ NAB and Pegasus argue that the companies compete fiercely on

³⁹⁶ *Id.* § 2.2.

³⁹⁷ *Id.* §2.21.

³⁹⁸ Applicants’ Reply Comments at 38.

³⁹⁹ *Id.*, Willig Decl. at 43-44.

⁴⁰⁰ *Id.* at 38, Willig Decl. at 6.

⁴⁰¹ *Id.*, Willig Decl. at n. 5. [In support of their argument, the Applicants note DirecTV’s lack of response to EchoStar’s “I like 9” pricing campaign. In August 2001, new EchoStar customers who purchased a system for \$199 or more, received EchoStar’s “America’s Top 100” programming package for \$9.00 per month for one year. EchoStar usually charges \$30.99 per month. Willig Declaration at n. 6.

⁴⁰² *Id.* at 22.

⁴⁰³ *See, e.g.* Pegasus Petition at 14, NRTC Petition at 31-35; NAB Petition at 15-31.

price and track each other's program offerings.⁴⁰⁴ Dr. MacAvoy and Mr. Sidak, on behalf of NRTC and NAB respectively, submit evidence that the two DBS companies price competitively with each other, and thus, they claim that elimination of the competition will produce price increases.⁴⁰⁵ NAB also contends that EchoStar and DirecTV compete intensely for the retail distribution of their products.⁴⁰⁶ NRTC and NAB suggest that the nearly simultaneous launch of local-into-local television broadcast service in major markets by EchoStar and DirecTV reflects the intense, direct competition between the two DBS operators.⁴⁰⁷

156. Opponents also contend that EchoStar's and DirecTV's services are closer, in terms of product characteristics, than are DBS and cable services. NAB, for example, asserts that EchoStar and DirecTV are the closest substitutes for one another "as the only significant satellite providers" of MVPD programming. It further argues that DBS is significantly differentiated from cable in terms of price, number of channels of programming, quality, and additional technical features such as pay-per-view options.⁴⁰⁸

157. Finally, Pegasus claims that certain low capacity cable systems are not effective competitors to DBS.⁴⁰⁹ It claims that older, low-capacity cable systems fail to offer the services, channel capacity, and technological advances to compete with DBS. Similarly, NAB claims that New EchoStar will have the incentive and power to raise prices and reduce service quality in areas served by low capacity cable systems.⁴¹⁰

158. *Merger Simulations Estimating Unilateral Effects.* In this proceeding, both parties opposing the merger and the Applicants submitted merger simulations that estimated the likely economic loss or gain to consumers from the merger. Dr. MacAvoy, on behalf of NRTC, estimates an annual consumer welfare loss of between \$120 million and \$700 million in areas not served by cable, while Mr. Sidak, on behalf of NAB, projects an annual consumer welfare loss of approximately \$700 million for the entire United States.⁴¹¹ To rebut these studies, the Applicants submitted their own merger simulation which projected annual consumer benefits of **REDACTED**. In addition, Commission staff performed a sensitivity analysis to determine how sensitive the merger simulation estimates are to variations in demand and cost parameters.

159. As discussed below, and in greater detail in Appendix E, we find fundamental flaws in, and have numerous unanswered questions concerning, the Applicants' merger simulation. More specifically, we find that the Applicants' claim that the merger will result in lower MVPD prices (despite the significant increase in market concentration) depends largely on the validity of their assumptions (or estimates) concerning: (1) the low cross-price elasticity of demand for EchoStar's and DirecTV's

⁴⁰⁴ NAB Petition at 16-19; Pegasus Petition, Rubinfeld Aff. at 9. NAB claims that direct head-to-head competition is evident in sports programming, movies, and international programming decisions, because when one company offers a new type of programming, the other follows suit. NAB Petition at 24-28.

⁴⁰⁵ NAB Petition, Sidak Decl. at 68-70, NRTC Petition, MacAvoy Decl. at 31-33.

⁴⁰⁶ NAB Petition at 31.

⁴⁰⁷ NRTC Petition at 34; NAB Petition at 19-24.

⁴⁰⁸ NAB Petition at 53.

⁴⁰⁹ Pegasus Petition at 18.

⁴¹⁰ NAB Petition at 58.

⁴¹¹ NAB Petition, Sidak Decl. at 29, NRTC Petition, MacAvoy Decl. at 51. For more detail on the merger simulation technique see Appendix E.

services;⁴¹² (2) the high own-price elasticities of demand for EchoStar and DirecTV;⁴¹³ (3) current marginal costs; and (4) projected marginal cost savings. We find these assumptions and estimates to be flawed or unsupported or both. We discuss each of these issues in turn.

160. First, as discussed in Appendix E, the methodology the Applicants use to compute the cross-price elasticities of demand is fatally flawed, and their estimate of a low degree of substitutability between EchoStar and DirecTV service is simply not credible. In addition, the conclusion that EchoStar and DirecTV do not really compete against each other is inconsistent with the characteristics of the DBS services offered by the Applicants, contradicted by documents submitted by the Applicants, and undercut by the allegations contained in the antitrust suit EchoStar filed against DirecTV.⁴¹⁴

161. As Dr. Sidak explains in his testimony, the Applicants are “... asking the Commission to believe that (1) EchoStar is a substitute for cable television service, and (2) cable television is a substitute for DirecTV, but (3) EchoStar is not a substitute for DirecTV and DirecTV is not a substitute for EchoStar.”⁴¹⁵ We agree with NAB on this point and find that these premises make little sense given the close similarities between the service packages offered by EchoStar and DirecTV, and the much greater differences between those service packages and services offered by cable companies.

162. Indeed, the similarity of their product offerings is at the very heart of the Applicants rationale for merging. The Applicants claim that of the 286 national channels carried by EchoStar, 240, or 84% are duplicated by Direct TV, and of the total 709 channels carried by EchoStar, 588 or 83% are also carried by DirecTV.⁴¹⁶ Moreover, the degree of overlap is even more pronounced in their most popular packages. EchoStar’s “America’s Top 100” and DirecTV’s “Total Choice” packages both offer over 80 channels of video and over 30 channel of audio. Furthermore, none of the non-shared channels accounted for more than 0.08 all-day Nielsen share.⁴¹⁷ The prices that EchoStar and DirecTV charge are also remarkably similar. Currently, the Applicants each offer promotions, in which the total price of a one year contract, including installation, activation fee and a year’s programming is \$456.88 for EchoStar and \$446.83 for DirecTV.⁴¹⁸ Thus, the Applicants are selling virtually identical products at almost the same price. If, as the record suggests, EchoStar and DirecTV services are close substitutes in the eyes of MVPD consumers, then the post-merger prices of EchoStar and DirecTV as well as cable subscription prices will be significantly higher than those predicted by the Applicant’s model.⁴¹⁹

163. In addition, the record is replete with evidence that EchoStar and DirecTV do indeed compete vigorously with each other and that this competition effectively constrains prices. For example

⁴¹² The *cross price elasticity of goods A and B* is the percentage change in demand for good A that results from a percentage change in the price of B.

⁴¹³ The *own price elasticity of good A* is the percentage change in demand for good A that results from a percentage change in the price of A.

⁴¹⁴ See n.337, *supra*; See also *EchoStar Communications Corp. v. DirecTV Entertainment Corp.*, Complaint ¶¶ 5-6, 26-85.

⁴¹⁵ NAB Petition, Sidak Decl at 44.

⁴¹⁶ EchoStar May 16 *ex parte* at 17.

⁴¹⁷ Of the non overlapping channels, only Travel Channel earned a rating, see Kagan World Media, “*Cable Program Investor*,” (July 29, 2002) at 11.

⁴¹⁸ EchoStar offer through Sears, offer code: JVCDHP, August 2002. DirecTV offer through American Express, offer code: AMEX, June 2002.

⁴¹⁹ For example, Dr Sidak, for NAB, performs a similar merger simulation to the Applicants assuming a higher elasticity of substitution and finds that prices would rise 7.3% for EchoStar and 3.5% for DirecTV. NAB Petition, Sidak Decl. at 28.

in their lawsuit challenging the validity of the SHVIA must carry rules, the Applicants stated that “Satellite carriers are in competition both among themselves and with local and regional cable systems across the United States for subscribers.”⁴²⁰

164. Most tellingly, the allegations made by EchoStar in the context of the antitrust suit it filed against DirecTV undercut the Applicants’ arguments here that their main competitor is cable and not the other DBS provider.⁴²¹ For example, in its Amended Complaint, EchoStar alleged that “[n]o other product duplicates or fully substitutes for . . . the high-power DBS subscription TV programming service.”⁴²² EchoStar further alleged:

Without high-power DBS customers cannot receive the same approximate number, types and variety of television channels or quality. Thus, customers do not consider either over-the-air broadcast or cable TV service to be effective substitutes for high-power DBS equipment and service.⁴²³

Thus, EchoStar itself, in sworn legal pleadings filed in its antitrust suit against its now merger partner, DirecTV, contended that the services offered by itself and DirecTV were closer substitutes than were services offered by cable companies or over-the-air broadcasters.

165. Second, we find the estimated current marginal costs generated by the Applicants’ merger simulation model to be inconsistent with other data submitted by the Applicants in the record. As discussed in Appendix E, the Applicants’ merger simulation implies a marginal cost per customer that is inconsistent with the cost data on the record. Data submitted by the parties in response to our data request suggests, however, that the actual marginal cost per customer is approximately **REDACTED** less.⁴²⁴

166. Third, based on the above observation, we are highly skeptical of the Applicants’ estimated own-price elasticity of demand of **REDACTED**.⁴²⁵ First, the Applicants did not obtain these estimates directly from DBS demand data. In addition, the estimates differ significantly from past estimates of MVPD elasticities. If these estimates are more negative than the true values, then the Applicants analysis will underestimate the extent to which post-merger prices will rise.

167. Finally, as discussed below in our analysis of the claimed merger benefits, we have serious questions and doubts concerning the Applicants’ projected cost reductions, which they claim will result from the merger.

168. Given the apparent flaws in the Applicants’ analysis, Commission staff undertook a sensitivity analysis of the merger simulations in order to determine how sensitive changes in consumer welfare were to variations in demand elasticities and marginal cost estimates. The staff analysis, which is discussed in greater detail in Appendix E, found that estimated welfare gains or losses from the merger will vary significantly depending on the assumed demand elasticities and marginal cost savings. Estimates of the consumer welfare losses can range as high as **REDACTED** per year. This sensitivity analysis indicates that the issue of whether the merger will generate a net benefit or harm to consumers

⁴²⁰ See Nov 6 2000 Memorandum in Support of Plaintiffs Motion for Summary Judgment as to First Amendment Issues in Satellite Broadcasting Communications Association of America et al v. F.C.C. et al.

⁴²¹ *EchoStar Communications Corp. v. DirecTV Enterprises, Inc.*, Civ. Action No. 00-K-212 (D. Colo. 2000).

⁴²² *EchoStar Communications Corp. v. DirecTV Entertainment Corp.*, Amended Complaint at ¶78.

⁴²³ *Id.* at ¶ 79.

⁴²⁴ See Appendix E.

⁴²⁵ Presentation by A. Joskow and R. Willig at 49 (July 2, 2002).

and the magnitude of that benefit or harm will depend critically on the values of the model parameters. In particular, the results will vary with the estimates of the own-price and cross-price elasticities of demand and the estimated efficiencies resulting from the merger.

169. With respect to these key parameters, we find the Applicants' model to be severely flawed and the model's results of net consumer benefits to be highly suspect. These findings are discussed more fully in Appendix E. We can give little credence to the Applicants' model parameters, particularly estimates of the demand elasticities for DBS and the pre-merger marginal costs of the Applicants. Moreover, because the data in the record are insufficient to determine with precision estimated own-price and cross-price elasticities of demand or projected savings in marginal costs, we can not determine independently and conclusively, the precise level of likely consumer harm that the proposed merger will cause. Nevertheless, the record suggest that the services provided by DirecTV and EchoStar are significantly closer substitutes than those offered by cable systems. This strongly suggests that, in the absence of any significant savings in marginal cost, the merger will result in a large increase in post-merger equilibrium prices. Given this likelihood, we cannot find that the Applicants have met their burden of demonstrating that the proposed merger will produce merger-specific public interest benefits of the magnitude the Applicants allege.

b. Coordinated Behavior

170. Both economic theory and empirical economic research have shown that firms in concentrated, oligopoly markets⁴²⁶ take their rivals' actions into account in deciding the actions they will take.⁴²⁷ When market participant's' actions are interdependent, noncompetitive collusive behavior that closely resembles cartel behavior may result – that is, high and stable prices.⁴²⁸ Such collusion or “conscious parallelism” may arise not because of any explicit agreement between the sellers “. . . but solely through a rational calculation by each seller of what the consequences of his price decision would be, taking into account the probable or virtually certain reactions of his competitors.”⁴²⁹ Economists have further recognized that mergers that cause significant increases in concentration may increase the likelihood of coordinated effects.⁴³⁰

171. The view that increased market concentration may increase the likelihood of anticompetitive, coordinated conduct has also been recognized by the Courts. For example, in the *Heinz* case discussed above, the court observed that “[m]erger law ‘rests upon the theory that, where rivals are few, firms will be able to coordinate their behavior, either by overt collusion or implicit understanding, in order to restrict output and achieve profits above competitive levels.’”⁴³¹ The court went on to state that “[i]ncreases in concentration above certain levels are thought to ‘raise[] the likelihood of interdependent anticompetitive conduct.’”⁴³²

⁴²⁶ An oligopoly market is a market in which only a small number of firms compete. *See, e.g.*, DENNIS W. CARLTON & JEFFREY M. PERLOFF, *MODERN INDUSTRIAL ORGANIZATION* 7-8 (2d ed. 1994)

⁴²⁷ Viscusi, Vernon and Harrington, *Economics of Regulation and Antitrust* MIT Press 2000, at 107.

⁴²⁸ Douglas F. Greer, *Industrial Organization and Public Policy*, MacMillan 1992, at 269.

⁴²⁹ D.F. Turner, *The Definition of Agreement Under the Sherman Act: Conscious Parallelism and Refusals to Deal*, Harvard Law Review (February 1662) at 661.

⁴³⁰ *See* John Kwoka, Jr., “The Effect of Market Share Distribution on Industry Performance,” *The Review of Economics and Statistics*, at 101-9, Feb. 1979.

⁴³¹ *FTC v. H.J. Heinz Co.*, 246 F.3d 708, 715 (D.C. Cir. 2001) (quoting *FTC v. PPG Indus.*, 798 F.2d 1500, 1503 (D.C. Cir. 1986).

⁴³² *Id.* at 175-16 (quoting *U.S. v. General Dynamics*, 415 U.S. 486, 497 (1974).

172. A number of merger Opponents contend that, because of the nature and characteristics of the DBS industry, coordinated anticompetitive effects are likely to result from the merger.⁴³³ NAB, for example, suggests that no market is more conducive to coordinated interaction than duopoly, and that coordinated effects will be exacerbated in the MVPD market for two reasons: (1) there will be no full-CONUS slots from which another DBS competitor could compete against the merged entity, thereby creating a substantial barrier to entry into the MVPD market; and (2) a firm that might currently be viewed as a relatively small “maverick firm” in a market with only three major participants will no longer serve that role post merger.⁴³⁴ Mr. Sidak, NAB’s economic expert, further suggests that the uniform national pricing policy could facilitate collusion between New EchoStar and cable operators because the uniform pricing policy would penalize, and thus limit, selective price reductions below an agreed-upon level by New EchoStar.⁴³⁵

173. Economists have identified several factors, which tend to increase the possibility of collusion. Collusion appears more likely, other things being equal, when: (1) there are few firms in the market; (2) there are high barriers to entry; (3) products are relatively homogeneous; (4) contracts are for relatively short periods, and the prices and terms are observable by other sellers; and (5) market conditions are relatively stable.⁴³⁶ These factors suggest that the Applicants’ proposed merger will increase the likelihood of coordinated anticompetitive behavior. First, even where consumers have access to cable, the merger would reduce the number of major MVPD operators to two – New EchoStar and cable – in most franchise areas. Second, as previously discussed, the market exhibits high barriers to entry. Third, cable and DBS operators would be able to observe each other’s marketing and pricing behavior, and so would be able to monitor whether implicit parallel prices were being maintained.⁴³⁷ Fourth, MVPD operators generally do not enter into long-term contracts with their subscribers. Consequently, if one operator were to deviate from an implicit pricing agreement, the other operator would be able to respond quickly in an effort to win back the customers, thereby rendering unprofitable any deviation from the established parallel prices. The merger would exacerbate some of these conditions by reducing the number of firms in the market, increasing market concentration.

174. In sum, basic economic principles and the characteristics of the market suggest that the proposed merger may increase the likelihood of collusion among MVPD providers. This would result in harms accruing to the vast majority of MVPD service consumers in the nation. Consequently, the consumer harms resulting from unilateral effects discussed above, which were estimated assuming the

⁴³³ Pegasus Petition at 21, 30-31.

⁴³⁴ NAB Petition at 54-55. NAB cites the DOJ Merger Guidelines which discuss maverick firms in relationship to coordinated behavior: “In some circumstances, coordinated interaction can be effectively prevented or limited by maverick firms – firms that have a greater economic incentive to deviate from the terms of coordination than do most of their rivals (e.g., firms that are unusually disruptive and competitive influences in the market.) *Merger Guidelines* § 2.12.

⁴³⁵ NAB Petition, Sidak Decl. at 34-35. Salop has shown that an identical posted price is similar to “most-favored-nation” clause in a sales contract that provides the buyer with protection against any price discrimination i.e., when seller offers discounted price to another buyer. Using standard oligopoly models, Salop shows that most-favored-nation causes rival firms to act co-operatively. See, Steven Salop, “Practices That (Credibly) Facilitate Oligopoly Coordination,” in Joseph E. Stiglitz and G. Frank. Mathewson, eds.. *New Developments in Analysis of Market Structure*, MIT Press, 265-290.

⁴³⁶ See, e.g., Alexis Jacquemin & Margaret Slade, *Cartels, Collusion, and Horizontal Merger*, in 1 HANDBOOK OF INDUSTRIAL ORGANIZATION 415 (19989); F.M. Scherer “*Industrial Market Structure and Economic Performance*,” Houghton Mifflin, 1980 at 199-200. See also T.F. and Peter C. Reiss, “Entry and Competition in Concentrated Markets,” *Journal of Political Economy*, (1991) at 977-1009. JEAN TIROLE, THE THEORY OF INDUSTRIAL ORGANIZATION 245- 253 (1988) (discussing factors facilitating coordinated effects).

⁴³⁷ As discussed in section V.B.4. *infra*, this factor may be exacerbated by the proposed national pricing plan.

remaining MVPD operators did not collude, may understate the harms that would actually result from the merger.

3. Reduction in the Magnitude of Future Innovation and in the Quality of Service

175. The MVPD market since the introduction of DBS competition is replete with examples of how competition has spurred innovation. Certain merger Opponents contend that the merger would reduce future innovation in DBS or result in a degradation in the quality of service. NAB, for example, claims that competition between EchoStar and DirecTV has spurred tremendous technological innovation, as evidenced by the introduction of dual-feed dishes, interactive multimedia programming, Personal Video Recorders (“PVRs”) built into set-top boxes, and spot beam satellites.⁴³⁸ NRTC argues that innovation in set-top box is best driven by competition, and that a monopolist would retard product innovation in set-top boxes.⁴³⁹ NAB also claims that competition between DirecTV and EchoStar “has resulted in significant consumer benefits, including: aggressive marketing and pricing; diverse programming packages; expanded local-to-local service; and innovative advanced technologies[,]” which will be jeopardized as a result of the merger.⁴⁴⁰ AAI argues that EchoStar and DirecTV are strong, direct competitors, and that continued DBS competition will help to ensure ongoing competitive discipline of DBS and cable operators.⁴⁴¹ The Applicants respond that the proposed merger will enable the merged entity to be more innovative and to better compete with cable.⁴⁴²

176. The evidence in the record suggests that the merger would likely reduce innovation and service quality. In recent years, the Applicants have improved their services, increased the variety of programming and non-programming options that they offer, and enhanced the technical capabilities of their equipment. At least some of these changes appear to have been motivated by the competitive pressure that each operator exerts on the other. The evidence further suggests that the two operators compete directly with each other for new customers and that the benefits of this competition would be lost if the merger were consummated. Thus, although the Applicants claim that they do not compete with each other, the record and our analysis appear strongly to contradict this assertion.

177. The lessened competitive pressure from the combination of the two DBS firms might well reduce New EchoStar’s incentive to improve services and quality. This would be particularly true in areas where subscribers are unserved or underserved by cable operators. We therefore find that this is a potential harm from the proposed merger.

4. National Pricing

178. The harms that consumers are likely to suffer from the higher prices likely to result from the post-merger market structure depend, at least in part, upon New EchoStar’s ability to set different prices in different geographic regions. Responding to concerns that New EchoStar would be able to raise price and exploit its dominant position in geographic regions not served by cable systems, the Applicants early on proposed their own remedy. Noting that they currently set monthly recurring prices on a nationwide basis, the Applicants committed New EchoStar to “pricing its DBS services on a uniform,

⁴³⁸ NAB Petition at 28-20.

⁴³⁹ NRTC Petition at 66.

⁴⁴⁰ NAB Petition at 15.

⁴⁴¹ AAI Comments at 2-3.

⁴⁴² Applicants' Reply Comments at 20-30.

nationwide basis.”⁴⁴³ The Applicants state that they will begin implementing this uniform nationwide pricing plan immediately upon regulatory approval of the merger, and that it will become “fully operational as soon as 24 months thereafter.”⁴⁴⁴ Dr. Willig, the Applicants’ economic expert, claims that, as a result of this commitment, “prices for rural customers will be driven by competition in urban areas.”⁴⁴⁵ Dr. Willig further argues that the nationwide “monthly service prices” are unlikely to rise as a result of the merger, because these prices are “generally driven by prices set by the major cable MSOs throughout the country, which often face competition from overbuilders and other MVPD providers.”⁴⁴⁶ As discussed below, the Applicants’ commitment does not appear to preclude the possibility that customers in areas without access to cable will not be subject to price or quality discrimination or to a post-merger price increase. In fact, the Applicants admit that the uniform price guarantee would only apply to monthly programming fees, but not to the price of equipment or installation, and they appear to want to retain the ability to charge different programming prices in order to meet competition. Moreover, such a commitment, if implemented, may dampen competition between New EchoStar and cable operators.

179. Opponents criticize the uniform pricing proposal on a number of grounds. First, they argue that it is likely to be ineffective, since, even if New EchoStar set uniform monthly fees for programming services, it could discriminate against customers lacking access to cable through other means, including: (1) charging different prices for equipment and/or installation; (2) offering fewer free months of programming to such customers than it offers to customers with cable alternatives; (3) varying the number of channels available in various programming packages; and/or varying the number of local channels; and (4) providing different levels of customer service.⁴⁴⁷ Quoting statements by EchoStar’s Chairman and CEO, Mr. Ergen, Opponents further suggest that New EchoStar will insist on retaining the ability to respond with targeted promotions to promotions offered by local cable companies.⁴⁴⁸ Second, Opponents argue that, even if it were possible to enforce a uniform national price, that single price would exceed the pre-merger prices for both customers that have access to cable and those that do not.⁴⁴⁹ Finally, NAB contends that a uniform price policy would reduce the incentive of New EchoStar to cut prices in order to better compete with a particular cable system, since it would then have to cut prices nationwide.⁴⁵⁰

180. In response to the criticism that, despite the commitment to charge uniform monthly rates, New EchoStar could still discriminate against customers in areas without cable, the Applicants first note that the national pricing commitment is consistent with the Applicants’ past pricing practices. They further argue that, because of the difficulty in identifying customers that lack access to cable, it would be impractical to discriminate against such customers.⁴⁵¹ With respect to the criticism that the post-merger national price would exceed the pre-merger prices, the Applicants respond that DBS pricing decisions are

⁴⁴³ Application at 42. *See also* Applicants’ Reply Comment at ii (“Consumers across the country will pay the same price for this DBS service, *i.e.*, one nation, one rate card, regardless of a subscriber’s location.”). The Applicants further note that “[n]ational pricing is the most practicable and efficient method of DBS pricing.” Application at 34.

⁴⁴⁴ Applicants’ Reply Comment at 2.

⁴⁴⁵ Application, Willig Decl. at 25.

⁴⁴⁶ *Id.*

⁴⁴⁷ *See, e.g.*, NRTC Petition, MacAvoy Decl. at 53; NAB Petition, Sidak Decl. at 31 & 36; Pegasus Petition, Rubinfeld Aff. at 13.

⁴⁴⁸ NRTC Petition, MacAvoy Decl. at 53.

⁴⁴⁹ NAB Petition, Sidak Decl. at 31-34; NRTC Petition, MacAvoy Decl. at 52.

⁴⁵⁰ NAB Petition, Sidak Decl. at 34-35.

⁴⁵¹ Applicants’ Reply Comments at 68-70.

driven by competition with cable companies, since the majority of New EchoStar's customers have access to cable, and New EchoStar would have to attract cable subscribers in order to expand its subscriber base. Accordingly, the Applicants claim that New EchoStar is unlikely to have the incentive or ability to raise its national price because it would not want to lose customers to cable.⁴⁵²

181. Based on the evidence in the record, we cannot find that the national pricing plan proposed by the Applicants is likely to be an adequate or effective remedy for the competitive harms that are likely to flow from the proposed merger. The plan does not preclude price or quality discrimination, particularly against customers that have no access to cable systems. The Applicants' claim that such discrimination is "implausible" is contradicted by the record. For example, as recently as July 1, 2002, it was reported that DirecTV was using targeted promotions to win customers in the Los Angeles area residing within the franchise area of one particular cable operator.⁴⁵³ In addition in filings submitted in the record and in public comments by Mr. Ergen, Chairman and CEO of EchoStar, the Applicants leave open the possibility that New EchoStar will offer "local promotions for installation and equipment" in response to promotions by competing cable companies.⁴⁵⁴ Moreover, the Applicants admit that the uniform pricing commitment only applies to recurring monthly programming service fees, but not to the price of equipment or installation. To the extent that New EchoStar is able to discriminate in the price charged for equipment and installation, it could effectively charge different customers different amounts for the same DBS service.⁴⁵⁵ Contrary to the Applicants' contention, it does not appear that difficulties in distinguishing between customers that have access to cable from those that do not would prevent such discrimination. Rather, the record indicates that the Applicants have each implemented promotions that target customers in particular cable service areas in the past and there is no reason to believe that they could not do so again in the future.⁴⁵⁶ Moreover, as explained below, it is far from apparent that the national pricing plan will prevent substantial increases in post-merger prices.

182. In addition, it appears that the Applicants could discriminate in terms of service quality. For example, even if New EchoStar were to offer local-to-local television broadcast programming in all 210 DMAs and charge a uniform price for that option, the fact that the number of channels varies from DMA to DMA means that the per-channel cost of local-to-local programming could vary. Since rural DMAs tend to have fewer local channels, this means that rural customers will effectively pay a higher price for local programming. In addition, the Applicants may be able to implement quality discrimination in other ways. For example, they could design programming packages, such as regional sports programming, to appeal more to customers in urban areas than in rural areas. Similarly, they might charge more for and/or take longer to complete, necessary equipment repairs in rural regions.

⁴⁵² *Id.*, Willig Decl. at 25-26, 32.

⁴⁵³ Letter from Stephen E. Coran, Manatt, Phelps & Phillips, LLP, Counsel to NRTC, to Marlene H. Dortch, Secretary, FCC (Sep. 4, 2002) ("NRTC Sep. 4 *ex parte*") at Exhibit A; *See also* Applicants' Oct 8 *ex parte*, Attachment 2, 5.

⁴⁵⁴ *See, e.g.*, Applicants' Reply Comment at 69 ("The ability to offer local promotions for installation and equipment will not undermine the effectiveness of national pricing as a constraint."); *See also Ergen Makes His Case*, SATELLITE BUSINESS NEWS, December 21, 2001, at p.1 (Mr. Ergen quoted as stating that "I guess if you're saying if the cable company came in and offered a rebate in one city, would you respond to that? I think you could make allowances for that."); In this regard, we note that Professor Willig only claims that "*monthly* service prices" are unlikely to rise as a result of the merger. Application, Willig Decl. at 25.

⁴⁵⁵ For example, when DBS was first offered, providers charged a minimum of \$699 for equipment and \$150 for installation. Assuming that these charges are amortized over a one-year period and the discount rate is 7%, a difference of \$100 in up-front, non-recurring costs translates into a difference of \$8.65 in amortized monthly costs. *Annual Assessment of the Status of Competition in the Market for the Delivery of Video Programming*, 9 FCC Record 7002 (1994) at paragraph 65.

⁴⁵⁶ REDACTED.

183. Finally, we note that, while it is rational for the Applicants to want to retain the ability to respond to competition in particular local markets, this very incentive suggests that the Commission would need to monitor and enforce any uniform national pricing commitment. It would be costly and difficult for the Commission to perform such monitoring and enforcement, and it is unclear how effective its enforcement efforts would, or could, be.

184. Moreover, even if the Applicants committed to implement uniform national pricing on every element of their service, for the Commission to effectively enforce this commitment it would have to engage in intensive regulatory oversight, extending to tens of thousands of equipment retailers. The resources used in this oversight are a social cost that should be taken into consideration. Simply stated, replacing head-to-head competition with regulatory oversight not only would impose significant regulatory costs, but would also conflict with the goal of allowing competition to replace regulation, that both Congress and this Commission have long sought to achieve.

185. Furthermore, even if one assumed that regulatory monitoring could absolutely insure uniform national pricing, the merger nevertheless might well produce higher prices than prevailed before the merger. As the Applicants' expert, Dr. Willig, points out, the profit-maximizing uniform price-cost margin is inversely related to the weighted average own-price elasticity of demand, where the weights are the share of DBS customers in each market.⁴⁵⁷ If the merger causes New EchoStar's own-elasticity of demand to decline in all relevant markets and New EchoStar's marginal cost does not decline sufficiently, then the profit maximizing uniform price-cost margin will rise, and thereby result in higher prices for all DBS customers.⁴⁵⁸

186. Finally, it is not clear whether a uniform national pricing policy would tend to facilitate or discourage collusive pricing, which could raise prices even higher. On the one hand, a national pricing policy facilitates information exchange among competitors, which generally promotes coordinated pricing behavior. In addition, the uniform national pricing policy may make the Applicants less likely to cheat on collusive agreements and undercut particular cable companies, because they would have to make the price cut nationwide. Thus, in some respects, the national pricing plan may make such agreements more likely. On the other hand, a national pricing policy might increase the incentive of cable companies to reduce prices, because they would know that it would be more expensive for New EchoStar to respond to, or attempt to punish, any such price reduction. Which of these tendencies is likely to dominate will be influenced by the exact nature and terms of the uniform pricing policy, which are unclear. Even if we knew the exact terms, however, it is not clear whether the uniform pricing policy would increase or decrease the likelihood of collusive pricing. In either case, however, the uniform pricing policy would not remedy any unilateral price increase that the New EchoStar would have the incentive to implement as a result of the merger.

187. For all of these reasons, we conclude that the Applicants' proposed uniform national pricing policy is unlikely to remedy the anticompetitive effects that are likely to result from the merger in both rural and urban markets, and could, in fact, exacerbate the harms.

⁴⁵⁷ Applicants' Reply Comments, Willig Decl. at 27.

⁴⁵⁸ It is technically possible that, despite an increase in the profit-maximizing price-cost margin, DBS prices could fall if the merger resulted in a sufficiently large decline in New EchoStar's marginal cost of providing DBS service. As discussed below, however, the Applicants have not presented sufficient specific and verifiable evidence to demonstrate that the merger will result in a sufficiently large reduction in marginal cost to effectuate such a decline in consumer price.

C. Potential Public Interest Benefits – MVPD Market

188. We next consider evidence of efficiencies and other public interest benefits that Applicants claim will result from the proposed merger. Under Commission precedent, the burden of persuasion is on the parties proposing the transfer of a license or authorization to show that the potential public interest benefits of the transfer outweigh the potential public interest harms.⁴⁵⁹ “Efficiencies generated through a merger can mitigate competitive harms if such efficiencies enhance the merged firm’s ability and incentive to compete and therefore result in lower prices, improved quality, enhanced service or new products.”⁴⁶⁰

189. There are several criteria the Commission applies in deciding whether a claimed benefit should be considered and weighed against potential harms. First, claimed benefits must be *merger specific* – *i.e.*, the claimed benefits must be likely to be accomplished as a result of the merger but unlikely to be realized by other means that entail fewer anticompetitive effects.⁴⁶¹ As the Commission explained in the *Bell Atlantic/NYNEX Order*: “Efficiencies that can be achieved through means less harmful to competition than the proposed merger . . . cannot be considered to be true pro-competitive benefits of the merger.”⁴⁶²

190. Second, claimed benefits must be *verifiable*. Because much of the information relating to the potential benefits of a merger is in the sole possession of the merging parties, those parties must provide sufficient support for any benefit claims so that the Commission can verify the likelihood and magnitude of each claimed benefit.⁴⁶³ In this regard, the magnitude of benefits must be calculated net of the cost of achieving them.⁴⁶⁴ Moreover, speculative benefits that cannot be verified will be discounted or dismissed. Thus, for example, benefits that are to occur only in the distant future may be discounted or

⁴⁵⁹ See, e.g., *Bell Atlantic-NYNEX Order*, 12 FCC Rcd at 20063 (“Applicants bear the burden of showing both that merger-specific efficiencies will occur, and that they sufficiently offset any harms to competition such that we can conclude that the transaction is pro-competitive and therefore in the public interest.”); *SBC-Ameritech Order*, 14 FCC Rcd at 14825 (same).

⁴⁶⁰ *Bell Atlantic-NYNEX Order*, 12 FCC Rcd at 20063; see also *DOJ/FTC Guidelines* § 4 (“The Agency will not challenge a merger if cognizable efficiencies are of a character and magnitude such that the merger is not likely to be anticompetitive in any relevant market. To make the requisite determination, the Agency considers whether cognizable efficiencies likely would be sufficient to reverse the merger’s potential to harm consumers in the relevant market, e.g., by preventing price increases in that market.”).

⁴⁶¹ See, e.g., *Bell Atlantic-NYNEX Order*, 12 FCC Rcd at 20063 (“Pro-competitive efficiencies include only those efficiencies that are merger-specific, *i.e.*, that would not be achievable but for the proposed merger.”); *SBC-Ameritech Order*, 14 FCC Rcd at 14825 (“Public interest benefits also include any cost saving efficiencies arising from the merger if such efficiencies are achievable only as a result of the merger. . . .”); see also *DOJ/FTC Guidelines* § 4 (“The Agency will consider only those efficiencies likely to be accomplished with the proposed merger and unlikely to be accomplished in the absence of either the proposed merger or another means having comparable anticompetitive effects.”)

⁴⁶² *Bell Atlantic-NYNEX Order*, 12 FCC Rcd at 20063.

⁴⁶³ See, e.g., *id.*, at 20063 (“These pro-competitive benefits include any efficiencies arising from the transaction if such efficiencies . . . are sufficiently likely and verifiable. . . .”); *SBC-Ameritech Order*, 14 FCC Rcd at 14825, (same); see also *DOJ/FTC Guidelines* § 4 (“[T]he merging firms must substantiate efficiency claims so that the Agency can verify by reasonable means the likelihood and magnitude of each asserted efficiency, how and when each would be achieved (and any costs of doing so), [and] how each would enhance the merged firm’s ability to compete. . . .”).

⁴⁶⁴ *DOJ/FTC Guidelines* § 4 (“Cognizable efficiencies are assessed net of costs produced by the merger or incurred in achieving those efficiencies.”).

dismissed because, among other things, predictions about the more distant future are inherently more speculative than predictions about events that are expected to occur closer to the present.

191. Third, benefits are generally counted only to the extent that they can mitigate any anticompetitive effects of the merger.⁴⁶⁵ Since, in general, reductions in marginal cost are more likely to result in lower equilibrium prices. We will more likely find marginal cost reductions to be cognizable than reductions in fixed cost.⁴⁶⁶

192. Finally, the Commission applies a sliding scale approach to evaluating potential benefits, under which it will require applicants to demonstrate that claimed benefits are more likely and more substantial, the greater the likelihood and magnitude of potential harms. More specifically, “[a]s the harms to the public interest become greater and more certain, the degree and certainty of the public benefits must also increase commensurately in order for us to find that the transaction on balance serves the public interest. This sliding scale approach requires that where, as here, potential harms are indeed both substantial and likely, the Applicants’ demonstration of claimed benefits also must reveal a higher degree of magnitude and likelihood than we would otherwise demand.”⁴⁶⁷

193. As discussed below, the Applicants claim that the merger will generate three basic benefits relating to the MVPD market. First, they argue that the merger, by eliminating duplicative use of the limited DBS spectrum, will permit New EchoStar to use that spectrum more efficiently, thus permitting it to offer new and improved services to consumers, including local programming services in all 210 DMAs and other new video services, more HDTV channels and more VOD services. Second, they claim that the merger will generate efficiencies and other cost savings that will result in lower prices to consumers. Finally, because of its lowered costs and larger effective spectrum capacity, the Applicants claim that New EchoStar will be a stronger competitor to cable than either EchoStar or DirecTV could be on its own.

1. New Services

194. As previously discussed, the Applicants argue that the merger will greatly improve spectrum efficiency by eliminating substantial duplication of programming, which will allow the merged entity to offer new and better services to consumers.⁴⁶⁸ According to the Applicants, these spectrum efficiencies will permit New EchoStar to offer local programming in all 210 DMAs.⁴⁶⁹ In addition, they claim that with the spectrum liberated from duplicative carriage, they will be able to offer at least 12 HDTV channels (compared with the two to three HDTV channels that DirecTV and EchoStar individually can offer currently),⁴⁷⁰ as well as greatly expanded PPV, VOD, educational, specialty and

⁴⁶⁵ See, e.g., *Bell Atlantic-NYNEX Order*, 12 FCC Rcd at 20063 (“Efficiencies generated through merger can mitigate competitive harms if such efficiencies enhance the merged firm’s ability and incentive to compete. . .”).

⁴⁶⁶ See, e.g., *DOJ/FTC Guidelines* § 4 (noting that marginal cost reductions may lessen the likelihood or effectiveness of coordinated interaction (by enhancing the incentive of a maverick to lower price or by creating a new maverick firm) and also may reduce a merged firm’s incentive to initiate a unilateral price increase.)

⁴⁶⁷ *SBC-Ameritech Order*, 14 FCC Rcd at 14825 Cf. *DOJ/FTC Guidelines* § 4 (“The greater the potential adverse competitive effect of a merger . . . the greater must be cognizable efficiencies in order for the Agency to conclude that the merger will not have an anticompetitive effect in the relevant market. When the potential adverse competitive effect of a merger is likely to be particularly large, extraordinarily great cognizable efficiencies would be necessary to prevent the merger from being anticompetitive.”).

⁴⁶⁸ Application, Eng. Statement at 8-9.

⁴⁶⁹ Applicants’ Reply at 3-5.

⁴⁷⁰ Application, Eng. Statement at 10.

foreign language programming, and other new and improved product offerings, including interactive services.⁴⁷¹

195. Applicants project a discounted present value of free cash flow from new services of **REDACTED**.⁴⁷² These new services include the provision of local-into-local television programming in the DMAs where EchoStar and DirecTV currently do not provide local programming, VOD and PPV, HDTV, and interactive services. The Applicants acknowledge that they will incur certain costs in moving customers over to a single set-top box platform, which is necessary for the realization of these new services. The Applicants estimate that it will cost an average of **REDACTED** per customer for each customer transitioned, or a total of **REDACTED** in expenditures over three years to perform the box-swap.⁴⁷³ Deducting the cost of the box-swap, yields an estimated net increase in revenues (in present value terms) of **REDACTED**.⁴⁷⁴

196. Opponents, while conceding that the merger could eliminate duplicative programming, respond that consolidating channel delivery and eliminating duplicative programming could be achieved through less anticompetitive means. For example, some Opponents suggest that DirecTV and EchoStar could form a joint venture to share channel uplinks and downlinks and use compatible set-top boxes that could receive programming from either company's satellites,⁴⁷⁵ and that the spectrum efficiencies are therefore not merger specific.

197. Several Opponents of the merger claim that nationwide local-into-local service could be achieved through less anti-competitive means, because, as discussed in Section IV.C.1 *supra*, each of the Applicants individually has enough Ku-band CONUS capacity to offer local television broadcasting service to significantly more markets than they do today (at least 100 markets, and possibly all 210 markets).⁴⁷⁶ Opponents contend that, using existing or planned spot beam satellites, the Applicants individually could increase the number of markets in which they provide local channels to as many as 100 DMAs.⁴⁷⁷ Opponents also contend that improved modulation and compression techniques can yield at least a 30% increase in transponder capacity, while replacing existing MPEG-2 encoders with MPEG-4 would increase efficiency by a factor of two or three.⁴⁷⁸

198. NAB notes that the Applicants have failed to disclose how many markets each company individually could serve with its own satellite fleet, or proposed fleet, and argues that, without this information, it is impossible to determine what proportion of the benefits arising from providing local programming in all 210 DMAs is merger-specific.⁴⁷⁹

199. *Discussion.* As discussed, the merger offers certain technical efficiencies by reducing the amount of duplicative programming that is currently carried by both DirecTV and EchoStar. For purposes of the Commission's public interest analysis, however, the relevant question is not how much

⁴⁷¹ Application, Eng. Statement at 11.

⁴⁷² Letter from Pantelis Michalopoulos, Esq. on behalf of EchoStar and Gary M. Epstein, Esq. on behalf of Hughes to Marlene Dortch, Secretary, FCC (July 5, 2002) at 7 ("Applicants July 5 *ex parte*")

⁴⁷³ *Id.* at 28. The Applicants claim that customers will bear none of the costs of this transition, however. *Id.*

⁴⁷⁴ Applicants' July 5 *ex parte* at 28.

⁴⁷⁵ Duke Law Reply Comments at 16-17; NAB Petition at 75-76; Pegasus Petition at 61; NRTC Petition at 63-65.

⁴⁷⁶ Pegasus Petition at 41-42; NAB Petition at 84-89; and Duke Law Comments at 22.

⁴⁷⁷ *See, e.g.*, NRTC Petition, Morgan Decl. at 2; Pegasus Petition, Rusch Aff. at 10.

⁴⁷⁸ NAB Petition, Gould Decl. at 6-7; Pegasus Petition, Rusch Aff. at 11.

⁴⁷⁹ NAB Petition at 77-79.

spectrum will be conserved, but rather whether and how those spectrum savings will translate into new or improved products or lower costs. We find, as discussed below, that the Applicants have failed to satisfy their burden of demonstrating that these spectrum efficiencies will result in cognizable, merger-specific public interest benefits.

200. We note at the outset that the Applicants essentially present their efficiencies case by comparing the free cash flow that they claim will result from services that the merged entity will offer after the merger⁴⁸⁰ with the free cash flow that each of the Applicants receives today from the services each currently offers. This is the wrong basis for comparison. First, it is a measure of the Applicants private benefit, not the public interest. Second, even if one wanted to determine the private benefits of the merger to the Applicants, the appropriate comparison is to contrast the present discounted value of the stream of profits that the merged entity is likely to receive from services it is likely to offer after the merger with the present discounted value of the stream of profits that DirecTV and EchoStar individually would likely earn from services each would likely offer absent the merger. For example, if, absent the merger, the Applicants individually would offer local programming in the top 100 DMAs, then the incremental revenues attributable to local programming that can be said to result from the merger are only the revenues from the additional DMAs that would not be served, but for the merger.

201. An additional problem with the Applicants' efficiency claims is that they ignore the possibility that, because the merged entity will possess more spectrum, it will use it less efficiently than would EchoStar and DirecTV individually absent the merger. In particular, the merger may affect the incentive of the merged entity to adopt new, more productive technology, which in turn could affect how efficiently the spectrum will be used. The reason that the merged entity may be less willing to invest in productivity-enhancing technology is that the marginal value of a firm's spectrum will decline as the total amount of spectrum it controls increases.⁴⁸¹ This suggests that, if as a result of the merger, New EchoStar doubles the amount of spectrum it controls, it will have a reduced incentive to invest in productivity-enhancing technology. We note, in this regard, that the Applicants themselves have acknowledged the diminishing marginal value of the recovered spectrum.⁴⁸² Thus, from a social welfare point of view, the merged entity may select a technology that is less efficient than it would select if each separate DBS competitor controlled less spectrum resulting in a public interest harm rather than a benefit.

202. Another problem with the Applicants' efficiency showing is that many of the claimed benefits appear highly speculative. For example, the Applicants claim that, with the launch of NEW ECHOSTAR 1 in 30 months, they will be able to offer local programming in all 210 DMAs. This claim, however, is premised on a number of assumptions that may not prove true. For example, the prediction assumes that NEW ECHOSTAR 1 can be launched in 30 months and put in operation within six months after launch, but both these dates may slip. Indeed, Applicants' claimed timeline and costs are inconsistent with guidance given to the financial community that the box-swap could cost \$2.5 billion and

⁴⁸⁰ The Applicants estimate future cash flow for the years 2002 through 2007. They then calculate the earnings before interest, taxes, depreciation, and amortization ("EBITDA") for 2007, and then apply a "terminal multiple" of **REDACTED** to the year 2007 EBITDA to obtain an estimate of future EBITDA from 2008 in perpetuity. Applicants' July 5 *ex parte* at 11.

⁴⁸¹ The following illustrates this point. Since channels differ in popularity, a DBS provider, with limited capacity will initially choose the most valuable channels to transmit and will add less popular channels only as its capacity increases. The DBS provider can increase capacity either by adding spectrum or adopting new, more productive technology. But, the channels transmitted as a result of this increase in capacity will nevertheless be less valuable than the provider's most popular channels.

⁴⁸² In Letter from Pantelis Michalopoulos, Esq. on behalf of EchoStar and Gary M. Epstein, Esq. on behalf of Hughes to Marlene Dortch, Secretary, FCC (August 2, 2002) ("Applicants' Aug. 2 *ex parte*"), the Applicants state: **REDACTED**.

take four years.⁴⁸³ The prediction also assumes that the 1500 local television channels that New EchoStar will transmit will be in standard definition format. If, however, broadcast HDTV is introduced in local markets more quickly and more broadly than the Applicants assume, then the merged entity may have inadequate transponder capacity to carry all the local channels in HDTV format.⁴⁸⁴ If this proves true, then this may undermine the Applicants' estimates of the incremental revenues that they expect will flow from providing local television programming in all 210 DMAs, thus undercutting their projected efficiencies and benefits. More generally, many of the Applicants' efficiency claims are inherently speculative because they are not projected to occur until three or more years after consummation of the merger.⁴⁸⁵

203. In addition, many of the claimed merger benefits do not appear credible. For example, we are skeptical of the Applicants' financial projections concerning the planned expansion of local programming into all 210 DMAs. Specifically, the Applicants' acknowledge that **REDACTED**.⁴⁸⁶ Purely from an economic standpoint, we are not persuaded that the private benefits of being able to claim that New EchoStar provides local programming into all 210 DMAs outweigh the economic losses that it is likely to incur in serving those markets. If it appears likely that the New EchoStar will lose money on providing local programming in some number of the smaller DMAs, then we need to be skeptical that it will actually carry out this strategy, and we must therefore discount the associated claimed benefits. Indeed, DMAs 101-210 have 600 local channels that would be carried to reach only an additional 14% of the population.⁴⁸⁷ Similarly, the Applicants have not presented sufficient convincing evidence that they will actually use the entire amount of spectrum held by New EchoStar. Particularly, if the marginal return from such spectrum is low enough, the Applicants may simply choose to "warehouse" the spectrum, even though the spectrum would be of much greater value to another entity.

204. Finally, we are not persuaded by the Applicants' attempt to quantify the benefits of many of the new services that they claim they will offer. Although the Applicants have submitted what they characterize as a "synergies presentation" that attempts to estimate the free cash flow and EBITDA gains from these new services, we find this presentation flawed in a number of respects. First, we note that the Applicants do not attempt to estimate specifically the incremental profit that is likely to be generated by these new services, even though profit is the economically meaningful measure of the merged entity's private gain or surplus. In addition, however, even if they were accurately estimating their expected incremental profit, this would not necessarily provide a clear indication of the net gain in social welfare. In particular, if the incremental cash flow results from customers' switching from cable, then that incremental cash flow may well exceed the incremental increase in social surplus, since it may come at the expense of cable companies that suffer correspondingly lower profits.⁴⁸⁸

⁴⁸³ See Douglas S. Shapiro, Michael L. Savner and Jeffrey R. Toohig, *Initiating Coverage of DBS Sector*, (Equity Research, Bank of America Securities, Sept. 19, 2002) at 6.

⁴⁸⁴ According to the Applicants, each HDTV local channel uses as much as ten times as much spectrum as a SDTV channel. Application, Eng. Statement, at 13-14.

⁴⁸⁵ Cf. *DOJ/FTC Guidelines* § 4, n. 37 ("Delayed benefits from efficiencies (due to delay in the achievement of, or the realization of consumer benefits from, the efficiencies) will be given less weight because they are less proximate and more difficult to predict.")

⁴⁸⁶ Applicants' Aug. 2 *Ex Parte*.

⁴⁸⁷ Shapiro et al. at 37-38.

⁴⁸⁸ Similarly, in estimating the gain in free cash flow from providing local programming in all 210 DMAs, the Applicants assume that the introduction of the local programming will increase their market share in all geographic markets by the same percentage. We find this assumption to be highly unrealistic. Particularly for those geographic markets where customers do not have access to cable and where current DBS penetration rates are already high, we

(continued...)

205. More generally, the Applicants provide aggressive revenue estimates for many of the new services that they claim the merged entity will provide, but they fail to provide detailed evidence supporting those revenue projections. For example, the Applicants project incremental revenues of **REDACTED**.⁴⁸⁹ The Applicants provide no economic model or any other empirical evidence to support these projections, however.

2. Cost Savings

206. The Applicants claim that the merger will generate significant cost savings of **REDACTED** per year or **REDACTED**.⁴⁹⁰ First, they assert that the merger will result in a reduction of **REDACTED** in subscriber acquisition costs (“SAC”), which represents a reduction in the cost of adding an additional customer of **REDACTED**.⁴⁹¹ The Applicants break down the reduction in SAC into the following categories: reduced piracy costs of **REDACTED** (resulting from increased signal security made possible by the shift to a single DBS service platform),⁴⁹² increased efficiency of installation for a savings of **REDACTED**, incremental volume discounts from hardware manufacturers and suppliers amounting to **REDACTED**, and savings in marketing, advertising and distribution of **REDACTED**.⁴⁹³ Second, the Applicants also claim that the availability of local programming, plus other enhancements, will reduce customer churn and save a total of **REDACTED**.⁴⁹⁴ Third, they claim that by merging, the parties will be able to realize a **REDACTED** reduction in programming costs which will amount to a total savings of **REDACTED**.⁴⁹⁵ Fourth, the Applicants claim savings of **REDACTED** resulting from reductions in general and administrative expense.⁴⁹⁶ Finally, they assert that the merger will permit them to reduce capital expenditures by **REDACTED**.⁴⁹⁷ Opponents dispute these projected cost savings and the claim that they will be passed on to consumers. NAB suggests that the high post-merger concentration makes it unlikely that the merged entity will pass any cost savings on to consumers.⁴⁹⁸ NRTC and Pegasus further claim that the additional costs associated with the merger make it unlikely that the merged entity will pass along any cost savings to consumers.⁴⁹⁹ NRTC and Pegasus also argue that reduced customer churn should not be considered an efficiency, because it is the result of the elimination

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would not expect market share to rise as much as it would in markets where customers have access to cable and DBS penetration is consequently lower.

⁴⁸⁹ Applicants Jul. 5 *ex parte* at 40.

⁴⁹⁰ *Id.* at 17.

⁴⁹¹ *Id.* at 18.

⁴⁹² Application at 36; Applicants July 5 *ex parte* at 18.

⁴⁹³ Applicants July 5 *ex parte* at 18.

⁴⁹⁴ *Id.* at 20.

⁴⁹⁵ *Id.* at 22.

⁴⁹⁶ *Id.* at 24.

⁴⁹⁷ *Id.* at 26. Part of the reduction in capital expenditures, according to the Applicants, will result from the ability of the merged entity to “utilize all 32 DBS transponders at 119° W.L. orbital location using just two satellites instead of the four that are slated to operate there.” Application, Eng. Statement at 12. The Applicants acknowledge, however, that they will incur additional capital expense in launching spot beam satellites to provide local programming into more DMAs. *Id.* at 27.

⁴⁹⁸ NAB Petition at 73-75. *See also* Duke Law Comments at 17.

⁴⁹⁹ Pegasus Petition at 53. For example, NRTC estimates that the set-top box change-out will cost the merged company more than \$5 billion, not the “couple of billion dollars over a period of three or four years” stated in the Application. NRTC Petition at 66-67.

of competition.⁵⁰⁰ NAB claims that the Applicants failed to include any empirical data to support their claims and that the efficiency gains would be in fixed costs, which are less likely to off-set the competitive harms resulting from the merger.⁵⁰¹ In response to the Applicants' July 5, 2002 *Ex Parte* presentation, NRTC questions the Applicants' claimed reduction in programming costs. NRTC claims this is not a true economic efficiency and, even if realized, might not even represent volume discounting. **REDACTED**.⁵⁰²

207. *Discussion:* We find a number of issues and problems with the Applicants' efficiencies showing. These issues and problems cause us to conclude that the Applicants have failed to adequately support their claims that the merger will result in significant cost savings. We discuss each of these issues in turn.

208. First, the Applicants have claimed several efficiencies that do not appear to be merger-specific, and therefore are not cognizable. For example, the Applicants claim that the merged firm will require over 30 million new set-top boxes, and that the cost per box will decline significantly **REDACTED** due to economies of scale in production. They then claim that the reductions in the cost of the set-top boxes represent an efficiency of the merger. To demonstrate that claimed volume-based cost savings are merger-specific, however, the Applicants must demonstrate that the cost savings result from the increased demand of the single merged entity, rather than from any increase in the entire industry demand. The Applicants have made no such demonstration. Moreover, they have not even alleged that the cost savings could not result absent the merger, because the components used by EchoStar and DirecTV individually are not sufficiently similar. Thus, for example, if set-top box manufacturers would use the same computer chips and hard drives, regardless of whether the parties merged, then any volume-related cost savings resulting from the growth in total market demand would not be deemed merger specific. Similarly, the Applicants cite several factors for the reduced churn that contributes significantly to their total projected costs savings. It is not clear, however that one of the factors contributing to reduced churn – the adoption of "best practices at call centers, service centers, and on installations" – is merger specific.⁵⁰³ Likewise, the Applicants claim that churn will be reduced because the merged entity will be able to offer a bundled MVPD/broadband product.⁵⁰⁴ As discussed below, however, it is not clear that the ability to bundle broadband service with DBS service is merger-specific.

209. Second, many of their other claimed cost savings appear to be either speculative or lacking in credibility. For example, according to the Applicants' own estimates, a significant percentage of the claimed cost savings will not accrue before 2006.⁵⁰⁵ As previously indicated, benefits that are projected to occur only in the relatively distant future are normally discounted because they are inherently less certain. This speculative nature of future benefits becomes particularly problematic if it is claimed, as Applicants do here, that certain benefits will continue into perpetuity. Specifically, the Applicants apply a terminal multiple of **REDACTED**, which is intended to measure the "going forward" value of cash flow for all benefits efficiencies that are present in year 2007.⁵⁰⁶ By applying this terminal multiple,

⁵⁰⁰ NRTC Petition at 67-68; Pegasus Petition at 56-57.

⁵⁰¹ NAB Petition, Sidak Decl. at 59-60.

⁵⁰² See NRTC Sept. 4 *ex parte*.

⁵⁰³ Applicants' July 5 *ex parte* at 20.

⁵⁰⁴ *Id.*

⁵⁰⁵ *Id.* at 17.

⁵⁰⁶ *Id.* at 11.

Applicants are basically claiming that the year 2007 efficiencies will continue forever.⁵⁰⁷ Claiming perpetual cost savings would always raise credibility issues, but those concerns are increased here, since some of the claimed cost savings appear to be of a limited duration. For example, the Applicants assumed that the merger would yield a reduction in piracy costs of **REDACTED** per gross add in the first year and **REDACTED** per gross add in each year thereafter, for a total savings of **REDACTED** in piracy costs. The projected reduction in piracy costs, however, is premised on changes in the conditional access software that will be implemented with the box swap. While this change in conditional access may initially reduce piracy, it is not at all clear that the incidence of piracy will not begin to rebound.⁵⁰⁸

210. In other cases, the Applicants either have clearly exaggerated the likely cost savings or have simply failed to provide adequate justification for their efficiency estimates. For example, the Applicants have not adequately substantiated their claimed savings in programming costs. In particular, they have not demonstrated that programming costs will necessarily fall to the extent they predict based on the merged entity's larger subscriber base. We note in this regard that the record indicates that **REDACTED**. Similarly, they have not provided sufficient evidence to support their claimed installation efficiencies and distribution efficiencies or the claimed cost reductions associated with reduced churn. In addition, the Applicants frequently fail to distinguish claimed cost savings that would result in a reduction in marginal cost from cost savings that would result in a reduction in fixed cost. For example, it is not clear whether the Applicants' projected savings in advertising, marketing, and distribution, which it claims will contribute to a significant reduction in SAC, represent savings in marginal cost or fixed cost.

211. In addition, the Applicants' analysis of cost savings takes the form of a business case analysis, rather than a welfare analysis that specifically considers whether claimed cost reductions result in net increases in social surplus, which can be balanced against any anticompetitive effects of the merger. Certain of the Applicants' claimed efficiencies appear to represent no true cost savings, but rather only a transfer of surplus. For example, it appears that a portion of the claimed reduction in SAC costs actually relate to a reduction in the subsidy DirecTV and EchoStar currently provide to retailers and new subscribers to cover part of the cost of equipment and installation. Since a reduction in the subsidy simply means that the retailer or customer will pay more, there is no cognizable efficiency gain from this portion of SAC. Reductions in these "expenses," rather, may be indicative of the emasculation of competition and the resulting consumer harms. Similarly, we agree with NRTC and Pegasus that reductions in churn may more accurately be considered as indicative of the reduction in consumer choice and so cannot be counted as a public benefit. Finally, any savings in programming costs that result from a change in bargaining power represent a shift in surplus between programming providers and DBS operators, but not necessarily an increase in total surplus.

212. To summarize, as described above, the Applicants have failed to demonstrate that certain of the claimed efficiencies are merger-specific. Other claimed cost savings appear too speculative, while others simply are not credible. Finally, other alleged cost savings do not appear to be not true efficiencies but rather represent a shift in surplus between parties without any necessary increase in social welfare. Again, as discussed above, what is important is the extent to which these lower costs lead to lower prices

⁵⁰⁷ We note that the Applicants' choice of multiplier is inconsistent with the discount rate they employ. Specifically, the Applicants' choice of a terminal multiple of **REDACTED** implies a discount rate of **REDACTED**. In their business case analysis, however, the Applicants generally employ a discount rate of **REDACTED**, such as when they compute the present value of the terminal value and the present value of the synergies in years 2003-2007. *Id.* at 11. Applying a consistent, ten percent discount rate in calculated the terminal multiple would reduce the multiple to 10, which would significantly reduce the calculated benefits.

⁵⁰⁸ *See Id.* at 18. *See also Satellite Business News*, 10 (Aug. 14, 2002) (discussing the view that any security system could be compromised given enough time, and that the only way to prevent piracy is to continue to upgrade the core security system).

and can offset the reduction in competition, rather than whether the merged entity will achieve a lower cost structure as a *per se* matter.

3. Enhanced Ability to Compete with Cable

213. The Applicants claim that one of the most compelling benefits of the proposed merger is that New EchoStar, as an integrated, full-service DBS provider, will be able to compete better with cable systems to the benefit of consumers. The Applicants claim that DBS spectrum inefficiency has precluded the Applicants individually from effectively competing with cable systems, particularly given existing must-carry obligations.⁵⁰⁹ The Applicants argue that as separate companies, neither EchoStar nor DirecTV has been able to discipline cable companies' prices and that only through the merger will DBS be able to provide effective, price-reducing competition. The Applicants note that cable companies have been continuing to raise their prices in excess of the consumer price index.⁵¹⁰

214. Opponents disagree that the merger is necessary for DBS to compete effectively with cable. Pegasus and others claim that DBS's current excellent ability to compete effectively with cable is evident by DBS subscriber growth rate. In 2000-2001, Pegasus states that DBS subscribers have increased by 24%, while cable subscribership increased by only 1.9%.⁵¹¹ ACA notes that the DBS subscriber growth rate is 2.5 times that of cable.⁵¹² ACC Satellite claims that the current competitive MVPD marketplace with its two DBS providers benefits consumers because it provides for increased customer services, products, features, channel selections, and competitive prices.⁵¹³

215. As an initial matter, we note that it is not entirely evident how this argument differs from the Applicants' other efficiency claims – *i.e.*, that the merger will lower New EchoStar's costs and allow it to offer new and innovative services. In particular, since it is not the Commission's role to pick winners and losers in competitive markets, it is not clear why any net increase in DBS market share resulting from the merger, by itself, should be treated as a public interest benefit.

216. One possible interpretation of the Applicants' argument, though the Applicants themselves do not articulate it, is that absent the merger, EchoStar and DirecTV would be driven from the market or marginalized by cable competitors. If the Applicants are implicitly making such a “failing firm” argument, we do not find it to be persuasive. As Pegasus and other merger Opponents note, the relative market share of DBS compared with cable has been one of steady and impressive growth. Furthermore, there is no evidence in the record that suggests that this growth will suddenly terminate, markedly decrease, or that DBS will suddenly begin to lose customers to cable.

217. A second interpretation would be that the merger will force cable competitors to cut prices and improve their cable offerings in ways they would not have attempted absent New EchoStar's assumed more competitive offerings. The problem with this argument is that the merger simulations, discussed above, already take into account the possibility that cable companies will cut price. If the Applicants are arguing that the merger simulations, in some way, underestimate the extent of the competitive reaction by cable companies, then they would need to explain the reasons for this underestimation. This, they have not done. Indeed they have not demonstrated that such a potential decrease in cable prices could overwhelm the likely negative effect of the merger with respect to

⁵⁰⁹ Application at 24.

⁵¹⁰ Applicants' Reply Comments at 45-47, 67.

⁵¹¹ Pegasus Petition at 37. *See also* Carolina Comments at 3; NRECA Comments at 6.

⁵¹² ACA Petition at 12.

⁵¹³ ACC Satellite Comments at 6.

increased MVPD market concentration. Thus, while the merged entity might be a more capable single competitor, that does not necessarily mean more effective competition in the MVPD market place, and therefore better results for consumers. To the contrary, our analysis demonstrates that the proposed merger would likely leave New EchoStar a more capable, but less effective, competitor, a situation that is more likely to harm than benefit consumers, and therefore the public interest.

D. Potential Public Interest Benefits—Broadband Market

218. *Introduction.* Applicants assert that the merger will benefit the public because it will “allow New EchoStar to deploy a true broadband alternative that is competitive in all major respects to DSL and cable modem services,” and that is able to compete effectively with the “bundled video, broadband and interactive service . . . that is being rolled out by those cable companies offering digital cable service.”⁵¹⁴ By “true broadband” the Applicants mean a competitively-priced residential Internet access service meeting the Commission’s definition of “advanced services” – *i.e.*, providing Internet connection speeds in excess of 200 kilobits per second (Kbps) in both directions of transmission – and that is provided primarily through the use of next-generation satellite systems employing Ka-band spectrum.⁵¹⁵ The Applicants argue that capturing the alleged benefits turns on the deployment of Ka-band systems because “Ku-band two-way broadband satellite services, such as those implemented by Starband and Hughes, will struggle to achieve sufficient economies of scale to effectively compete with terrestrial DSL and cable broadband services.”⁵¹⁶ The Applicants argue they must combine their Ka-band licenses and individual DBS subscriber bases in order to deploy a competitive satellite broadband service in time to challenge cable and digital subscriber line technologies (“DSL”) and to prevent cable from locking in its dominant position in the provision of bundled video/Internet access service.⁵¹⁷ The Applicants allege that the merger will enhance competition in the delivery of broadband Internet access services in urban areas and offer such services, at the same low price and high quality, to areas that are unlikely to be served by cable modem or DSL in the near future (if at all).⁵¹⁸ The Applicants assert that merger-related

⁵¹⁴ Applicants’ Reply Comments at 106, 83 (true broadband alternative) (bundled service by digital cable). *See also* Application at i (“The merger will allow New EchoStar to provide meaningful broadband competition with cable and telephone companies as a virtual third line into the home *for a bundle of video/data/Internet services.*”) (emphasis added).

⁵¹⁵ *Id.* at 83, n.198 (citing *Inquiry Concerning the Deployment of Advanced Telecommunications Capability to All Americans in a Reasonable And Timely Fashion, and Possible Steps To Accelerate Such Deployment Pursuant to Section 706 of the Telecommunications Act of 1996*, 17 FCC Rcd 2844, 2847-51 (2002) (“*Third 706 Report*”) (defining alleged “true broadband” benefit as meeting Commission’s definition of “advanced telecommunications capability”). For purpose of our analysis, we refer to such enhanced Internet access services as “satellite broadband service” unless the context requires otherwise. We note that the terms “broadband” and “broadband services” have come to mean many different things to many different people, and has been used to refer to ‘high-speed’ Internet access services—*i.e.*, in excess of 200 Kbps in at least one direction—in addition to “advanced services.” *Appropriate Framework for Broadband Access to the Internet over Wireline Facilities Universal Service Obligations of Broadband Providers*, Notice of Proposed Rulemaking, 17 FCC Rcd 3019, 3019 (2002) (“*Wireline Broadband NPRM*”); *See also Inquiry Concerning High-speed Access to the Internet Over Cable and Other Facilities; Internet Over Cable Declaratory Ruling; Appropriate Regulator Treatment for Broadband Access to the Internet Over Cable Facilities*), 17 FCC Rcd 4798, 4802-03 (2002) (“*Cable Modem Declaratory Order & NPRM*”).

⁵¹⁶ Application, Eng. Statement at 15.

⁵¹⁷ *Id.* at 47-48 (“Time to market is of the essence. If next-generation satellite broadband services reach the market only after cable and DSL have commanded 60% of potential broadband customers, it is not clear whether any late-coming service would be able to attract enough of the remaining customers to become viable.”); *id.* at 48 (“[O]nly a narrow window of opportunity is presented for imposing heightened pressure on cable before cable is able to lock in its dominant position.”)

⁵¹⁸ *Id.* at 43 (proposed merger “will have a profoundly positive effect on the deployment of facilities-based, advanced, two-way, broadband services via satellite to all Americans, especially in rural areas”); *id.* at 47 (merger
(continued....))

efficiencies would allow them to deploy satellite broadband to an alleged “critical mass” of five-million satellite broadband customers within five years.⁵¹⁹

219. Opponents contend that the Applicants’ competitive satellite broadband service is possible without the proposed merger.⁵²⁰ Moreover, Opponents argue that the merger will in fact *harm* competition for satellite broadband services in rural America by thwarting competition in the anticipated market for enhanced broadband Internet access services and will also eliminate competition in the market for existing, Ku-band Internet services.⁵²¹ NRTC argues that the Applicants “‘target’ a \$35 monthly charge—but they offer no definition of ‘target’ or any hint of when (or if) they will meet the ‘target’” and that “the Applicants propose their target price for a ‘basic monthly broadband service’ – but they fail to define what ‘basic’ service is and what kinds of services would constitute ‘broadband.’”⁵²² As NRTC further asserts, “basic” broadband “may mean the slowest of speeds or a level of service that few would want, leaving the door wide open for price discrimination for ‘non-basic’ broadband service.” As a monopolist, NRTC contends, “New EchoStar would have every incentive to set a high national price for ‘basic’ broadband; it would have a limited desire to compete against DSL and cable modem in the areas where those services enjoy a huge head start, and instead would have every incentive to overcharge rural Americans who have no other choices.”

220. For the reasons set forth below, we find that the record fails to support Applicants’ broadband services claims. We are particularly concerned that, as NRTC argues, the Applicants have provided too little detail about the price and nature of their proposed satellite broadband service for us to conclude that the proposed transaction will produce a non-speculative, merger-specific benefit with respect to broadband services. Based on the record before us, we cannot conclude that the proposed

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will “promote exponentially the efforts of both companies to implement truly competitive next-generation broadband systems in a fashion that, absent the merger, would likely be significantly less beneficial to the public.”); Applicants’ Reply Comments at 96 (“[T]he efficiencies flowing from the merger will enable New EchoStar to deploy a competitive true broadband satellite offering for the benefit of all U.S. consumers, rural, suburban and urban alike.”); *id.* at 106-109 (merger’s efficiencies will allow deployment of competitive, “true” broadband alternative to cable modem and DSL); NRTC Petition at 42 (summarizing Applicants’ claims).

⁵¹⁹ The Applicants contend that with this critical mass, they can “recover the significant up-front investment and subscriber acquisition costs associated with launching and marketing a new two-way broadband satellite service.” Applicants’ Reply Comments at 101. *See also* Application, Eng. Statement at 15 (estimating that “at least 5 million subscribers would be necessary to recover the significant up front investment and subscriber acquisition costs associated with launching and marketing [a competitive] two-way broadband satellite service”).

⁵²⁰ *See, e.g.*, NRTC Petition at 54-55, Morgan Decl. at 2-3, 36-39; Pegasus Petition at 47 (“[I]t is clear that both EchoStar and DIRECTV already are at the forefront in offering competitive broadband services, and that each can and would continue to develop enhanced broadband services on a competitive basis without the merger.”); *id.* at 49 (“Both EchoStar and Hughes each have sufficient spectrum (both in the Ku FSS and Ka FSS bands) to offer a competitive broadband service. Moreover, both have existing customer bases accustomed to using satellite services, vast distribution networks, and formidable financial resources necessary to support satellite broadband through the growth phase.”); NAB Petition at 104-105 (noting Applicants planned Ka-band projects and DirecTV’s “optimistic” statements about future of satellite broadband).

⁵²¹ *See, e.g.*, NRTC Petition at 50-51 (merger would cause Ku-band merger-to-monopoly in areas not served by cable modem or DSL); NRTC *ex parte* Reply Comments (April 4, 2002) (“NRTC Reply Comments”) at 30, n.75 (cause broadband monopoly in areas not served by cable modem or DSL); *id.* at ¶ 42 (cause broadband monopoly in rural America); NAB Petition at ii (“Consumers in [areas without other broadband options] will be at the mercy of a monopolist for broadband Internet access.”); *id.* at 102-03 (merger will “snuff out existing competition” for existing service in rural America); Pegasus Petition at 30 (“This merger will eliminate current choices in satellite broadband.”).

⁵²² *See* NRTC Sept. 4 *ex parte*, Attachment (Ex Parte Comments (Redacted)) at 35-36.

merger is necessary to allow New EchoStar to directly and effectively compete with DSL-based and cable modem services *or* with cable providers' bundled MVPD/Internet services. Additionally, on the record before us, we cannot conclude that the merger will speed the deployment of satellite broadband services to the millions of Americans in rural (and other underserved areas) who are unlikely to receive terrestrial broadband services in the foreseeable future. The record indicates that, to the contrary, the merger may impede the provision of any form of satellite Internet service, particularly to rural Americans.

221. *Background.* While most residential Internet access service is provided over narrowband connections, Americans are increasingly subscribing to broadband Internet access services.⁵²³ Such services today are predominantly provided by cable operators using cable modem technology, and secondarily by telecommunications carriers utilizing DSL.⁵²⁴ By contrast, current satellite-provided Internet access services constitute only a small percentage of all Internet access service accounts.⁵²⁵

222. Despite the large number of subscribers to terrestrially-provided Internet access services, millions of residential consumers may not have access to broadband Internet access services in the near-term.⁵²⁶ Although MMDS, third generation wireless (3G) and other wireless technologies have the potential to significantly expand the availability of broadband Internet access to consumers in rural areas,

⁵²³ We have recognized analysts' predictions concerning the likely increase in broadband connections. *Third 706 Report*, 17 FCC Rcd at 2870-71 ("Currently, the vast majority (80.0 percent) [of on-line households have] narrowband connections, but the percentage of high-speed connections should increase, so that in the next five years, 55.7 percent of access connections are projected to be high-speed or advanced."). Broadband Internet access services are approximately four times as fast as the less than 56 Kbps achieved by dial-up, or "narrowband," Internet access technologies. *See Inquiry Concerning the Deployment of Advanced Telecommunications Capability to All Americans in a Reasonable And Timely Fashion, and Possible Steps To Accelerate Such Deployment Pursuant to Section 706 of the Telecommunications Act of 1996*, 14 FCC Rcd 2398 (1999) (rate of 200 Kbps is "approximately four times faster than the Internet access received through a standard phone line at 56 kbps," and was chosen "because it is enough to provide the most popular forms of broadband—to change web pages as fast as one can flip through the pages of a book and to transmit full-motion video."). We anticipate that our measure of advanced services may change as technology continues to evolve. *See Third 706 Report*, 17 FCC Rcd at 2851.

⁵²⁴ *See Applicants' Reply Comments* at 87-88; *Third 706 Report*, 17 FCC Rcd at 2864-66. Throughout this discussion we refer to "DSL services," even though there are several classes of xDSL service. *See, e.g., Deployment of Wireline Services Offering Advanced Telecommunications Capabilities, Third Reconsideration Order*, 16 FCC Rcd 2101, 2104; *GTE Telephone Operating Cos.*, 13 FCC Rcd 22466, 22471 (1998) ("The 'x' in xDSL is a placeholder for the various types of DSL services, such as . . . ADSL (asymmetric digital subscriber line), HDSL (high-speed digital subscriber line), UDSL (universal digital subscriber line), VDSL (very-high speed digital subscriber line), and RADSL (rate-adaptive digital subscriber line)").

⁵²⁵ *See, e.g., Third 706 Report*, 17 FCC Rcd at 2859; 2869, App. C, Table 1; *Applicants' Reply Comments* at 88.

⁵²⁶ *See Applicants Reply Comments* at iii ("The 'digital divide' in the United States is real: as many as 40 million households in the United States today do not have access to high-speed Internet and data services . . ."); *id.* at 86 ("A report cited by the Commission puts the number of homes that may never have [cable modem or DSL] access at 20 to 30 million.") (citing *Third 706 Report*, at 2877, n.196 (in turn, citing studies by Salomon Smith Barney and Merrill Lynch)); NRTC Petition at 44 ("According to a recent FCC report, 75% of U.S. zip codes have at least one high-speed line, but 49.5% of U.S. zip codes are served by one or no providers.") (citing *High Speed Services for Internet: Subscribership as of December 31, 2000* (rel. Aug. 9, 2001)); *id.* at 45 ("A recent Congressional report stated that cable modem service is potentially available to an estimated 64 million households, leaving 40 million households without such access.") (citing Lennard G. Kruger, *Broadband Internet Access and the Digital Divide: Federal Assistance Programs*, CRS Report for Congress (Jan. 14, 2002) at CRS-2); NAB Petition at 100 ("One industry study indicates that in 2002, 28 percent of the U.S. will be without terrestrial broadband access. In the very near future, according to other industry observers, there will be approximately 20 to 30 million U.S. households that will be unserved by cable modem or DSL").

they have yet to do so to any significant degree.⁵²⁷ Thus, satellite-provided broadband Internet access services may provide one of the best potential options for millions of rural subscribers in the near term.⁵²⁸

223. Existing satellite-provided Internet access service is provided using Ku-band spectrum similar to, but with service rules different from, that used for DBS service.⁵²⁹ Ku-band systems have been optimized for the delivery of the DBS point-to-multipoint MVPD service. The evolution of Ku-band FSS systems with CONUS coverage beams and two-degree spacing requirements renders such systems less than optimum for ubiquitous point-to-point services like residential Internet access service.⁵³⁰ Current Internet access services provided with the Applicants' Ku-band systems may exceed 200 Kbps only in the downstream direction—upstream transmissions are advertised as approximately 128 and 150 Kbps.⁵³¹

224. At the time the Merger Application was filed, the Applicants owned or controlled the only two Ku-band Internet access services available nationally in the United States -- DirecTV's DirecWay service and EchoStar's Starband service.⁵³² The Applicants provide Ku-band service by leasing transponders from third parties, at an annual cost of \$2 million per transponder.⁵³³ Both use

⁵²⁷ See NRTC Petition at 49 (MMDS yet to emerge as major competitor to cable modem and DSL, and MMDS broadband access providers have scaled back service deployment); *Third 706 Report*, 17 FCC Rcd at 2878 (discussing potential of third generation wireless (3G) systems); NRTC *ex parte* Reply Comments at 32 (use of unlicensed technologies not competitive). *But see* Applicants' Reply Comments at 111 ("The Commission has recently observed that new entrants using several different technology platforms have already begun, or are poised to begin, playing a significant role in providing high-speed and advanced services to many areas of the country including smaller markets."); *id.* at 111-114 (discussing prospects of broadband deployment by MMDS, several Ka-band providers, 3G systems, advanced DSL technologies, and small cable companies).

⁵²⁸ See, e.g., NRTC Petition at 49 ("Regardless of which statistics are more accurate, it is indisputable that a very large number of rural Americans do not have access to cable modem or DSL services, leaving satellite as their only available choice.").

⁵²⁹ Currently, Ku-band Internet access service is provided in the fixed-satellite service (FSS) band, 11.7-12.2 GHz with the uplink portion of two-way service in the 14.0-14.5 GHz band. While the DBS ancillary service policy could facilitate one-way satellite Internet access service in the BSS band, 12.2-12.7 GHz, two-way service would not be feasible in the BSS band. See *2002 DBS Report and Order*. This is because the BSS feeder link band, 17.3-17.8 GHz, is limited to feeder link operation by both international and domestic footnotes to the tables of frequency allocations. See 47 C.F.R. §2.106, n.US271; International Radio Regulations, RR5.516. In addition, the BSS uplink is also allocated to BSS downlink effective April 1, 2007 rendering the band incompatible with the ubiquitous customer-premised two-way earth stations required for two-way satellite-provided Internet access service. See 47 C.F.R. § 2.106, n.NG163; International Radio Regulations, RR5.517.

⁵³⁰ See Applicants' Reply Comments, Friedman Decl. at ¶ 15 (unlike Ku-band systems, Ka-band systems better for broadband Internet access service because, "[a]mong other things, the use of many small spot beams [by Ka-band systems] facilitates the provision of point-to-point service by many different users with a high rate of efficient frequency reuse."); Douglas S. Shapiro, *EchoStar Communications Corp., Initiating Coverage with a Strong Buy*, Banc of America Securities (Equity Research) (Sep. 19, 2002) at 5 ("[W]hile we believe the DBS business is the most efficient broadcast architecture, it is also the most inefficient point-to-point architecture, making two-way services such as high-speed data, VOD, true interactivity and voice impractical or technologically impossible.").

⁵³¹ See, e.g., NRTC Petition at 45-46 (EchoStar's StarBand and DirecTV's DirecWay services provide upload/download speeds of 150/500 and 128/400 Kbps, respectively); Applicants' Reply Comments at 90 ("[C]urrent satellite offerings do not meet the Commission's definition of 'advanced services' because the satellite offerings are not capable of providing transmission speeds in excess of 200 kbps in both directions.")

⁵³² As discussed further below, after the merger application was filed, EchoStar withdrew its support of Starband and relinquished its voting interest. See, e.g., *EchoStar Stops Backing StarBand After \$100 Million Investment*, *Satellite Week* (Apr. 8, 2002); *StarBand Accepts Registration of EchoStar Board Members*, *Communications Daily* (May 8, 2002) (noting May 5, 2002, resignation of four EchoStar-appointed members from seven-person board).

⁵³³ See Applicants' Reply Comments at 91.

satellite dishes somewhat larger than DBS dishes and both offer a way to access some of the full-CONUS DBS orbital locations using a single dish.⁵³⁴ EchoStar's customers accessing the eastern and western DBS locations at 61.5° W.L. and 148° W.L. do not have a one-dish solution for bundled DBS/broadband service. Several firms—including two merger Opponents, NRTC and Pegasus – resell DirecTV's existing satellite-provided Internet access services.⁵³⁵

225. It appears that next-generation Ka-band satellite systems will be better-suited than existing Ku-band systems to provide “true” broadband Internet access because Ka-band technology will achieve higher bandwidths in both directions through more extensive use of spot beams and the frequency reuse that can be achieved with spot beams.⁵³⁶ Anticipating the benefits of Ka-band technology for satellite broadband services, the Commission has licensed several entities to provide Ka-band service.⁵³⁷ With respect to anticipated Ka-band services, the Applicants combined would control six of about 25 full-CONUS Ka-band orbital locations, depending on the results of other proceedings before the Commission.⁵³⁸ The Ka-band orbital locations that the merger would place under New EchoStar's control would be particularly well-suited to providing a “bundled” DBS/satellite broadband service over a single

⁵³⁴ See, e.g., Randy Sukow, *Satellite Internet: Another Piece in the Last-mile Broadband Puzzle*, Rural Telecommunications (Jul./Aug. 2001), available at <http://www.ruraltelecom.org/julaug01/satellite-b-full.html> (noting that the Internet-capable satellite dishes associated with Applicants' satellite Internet access services are “somewhat larger than dishes designed to receive TV service only.”)

⁵³⁵ Pegasus has announced that it will discontinue its Internet access service. See Pegasus Satellite Communications, Inc., 10-Q For Period Ending June 30, 2002 (filed Aug. 14, 2002) at 11 (“Because our Pegasus Express two way satellite internet access business no longer fits into our near term strategic plans, we entered into an agreement with an unaffiliated party in June 2002 to sell our Pegasus Express subscribers and the Pegasus Express equipment inventory for cash.”) available at <http://www.shareholder.com/Common/Edgar/1015629/1135338-02-25/02-00.rtf>.

⁵³⁶ See, e.g., Pegasus Petition at 40-41 (explaining Applicants' deployment of spot beams for MVPD services) (“Because the television signal [retransmitted with multiple spot beams] is transmitted to a small area, the same frequency may be re-used in other geographic areas without the interference that would result if two signals were transmitted nationally on the same frequency. This means that a single satellite can supply a large number of local television channels with relatively little spectrum usage.”). See also, WildBlue, *WildBlue Corporate Backgrounder*, at <http://www.wildblue.com/me/backgrounder.html> (visited Sep. 16, 2002) (WildBlue system designed to “use a large number of small ‘spot beams’ pointed at different geographic regions instead of using one single U.S. beam,” that such “[s]pot beams allow a large degree of frequency re-use (i.e. multiple beams can re-use the same frequency as long as they are aimed at different parts of the country), and should facilitate “up to 4 - 6 times as much bandwidth per dollar as a Ku-band satellite”).

⁵³⁷ Although spot beam technology could be used in the Ku band to provide point-to-point services such as broadband Internet access service, the service rules in the Ku FSS band require a satellite longitudinal spacing of two degrees. See *Licensing of Space Stations in the Domestic Fixed-Satellite Service*, 54 Rad. Reg. 2d (P&F) 577, 589 (1983). This requires that the use of small subscriber antennas be coordinated with the neighboring satellites in order to minimize interference between the co-channel services. Typically, small-antenna services on one satellite are only compatible with large-antenna services on the neighboring satellite, rendering it essentially impossible to commit an entire Ku-band FSS satellite to broadband Internet access services. Thus, Ku-band FSS satellite broadband services are implemented on a transponder basis rather than a satellite basis. On the other hand, the Ka-band service rules, while also requiring two-degree spacing, still allow for antennas in the two-foot range to be deployed ubiquitously on a co-channel basis on neighboring satellites with acceptable interference levels.

⁵³⁸ The combined locations of EchoStar and Hughes would satisfy the “one-dish” solution criterion of the Applicants. See, Appendix B-D. See also, Letter from Gary M. Epstein, Latham & Watkins, Counsel for Hughes Electronics Corporation and General Motors Corporation, and Pantelis Michalopoulos, Steptoe & Johnson LLP, Counsel for EchoStar Communications Corporation, to Marlene H. Dortch, Secretary, FCC (June 13, 2002) (“Applicants Jun. 13 *ex parte*”), Attachment at 38 (“Broadband Presentation”); EchoStar's pending Petition for Reconsideration seeks reinstatement of its Ka-band authorizations at 83° W.L. and 121° W.L., which were canceled for failure to meet milestones. See n.23, *supra*.

dish. Such a “one-dish” service would be akin to the bundled service offering increasingly provided by the larger cable operators.⁵³⁹

226. *Applicants’ Claimed Benefits.* The Applicants claim that the merger will result in “many efficiencies” that “allow New EchoStar to deploy a true broadband alternative that is competitive in all major respects to DSL and cable modem services.”⁵⁴⁰ The Applicants contend that “[t]he merged company will combine the resources and subscriber bases of both [Applicants] which will result in substantial cost and service advantages over any possible individual Ka-band offering of EchoStar or Hughes.”⁵⁴¹ Such enhanced broadband service will, the Applicants allege, be “akin to an increase in the number of broadband competitors from “zero to one” in most areas and ‘one-to-two’ or ‘two-to-three’ in other areas of the country.”⁵⁴² This increase in competition would, they allege, in turn force cable operators to further improve their systems.⁵⁴³

227. *Verifiable, Non-Speculative in Nature.* The Applicants’ predicted benefits primarily are based on the deployment of new satellites using spot beam technology over the Ka-band spectrum. Although licenses for the use of this spectrum have been issued and some satellites are currently scheduled, none have been deployed. Despite the potential for providing broadband Internet access services using Ka-band spectrum, several would-be providers have recently delayed further deployment of their systems due to a lack of funding. For example, Astrolink suspended construction of its system following a significant investment; PanAmSat has given low priority to its Ka-band development; and WildBlue’s plans have been slowed due to funding difficulties.⁵⁴⁴ The license for Motorola’s Ka-band Millennium System was declared null and void because construction was not commenced by January 31, 2002, as required.⁵⁴⁵ Spaceway, the Ka-band system planned by DirecTV, however, is scheduled to

⁵³⁹ See Applicants’ Reply Comments at 82, n.146. More generally, we have previously recognized the importance of bundled video and Internet access service. *Accord, Annual Assessment of the Status of Competition in the Market for the Delivery of Video Programming*, Eighth Annual Report, 17 FCC Rcd 1244, 1248 (2002) (“The most significant convergence of service offerings continues to be the pairing of Internet service with other service offerings.”)

⁵⁴⁰ Applicants’ Reply Comments at 106.

⁵⁴¹ *Id.* at 106.

⁵⁴² *Id.* at 81.

⁵⁴³ *Id.*, Willig Decl. at 36-37 (merger’s effect on competition in the broadband Internet access services market generally would be to “likely pressure cable providers to upgrade their infrastructure so that connection speeds do not deteriorate as the subscriber base increases,” thereby “increase[ing] the speed at which extant cable modem subscribers connect to the Internet or allow more broadband users at any given connection speed”).

⁵⁴⁴ See, e.g., Applicants’ Reply Comments at 93 (“Just recently, Astrolink reported that it had terminated its Ka-band spacecraft contract with Lockheed Martin, after having built 90% of its first spacecraft, and after spending about \$710 million on its Ka-band system and finding itself unable to finance the remaining cost of implementing the Astrolink broadband system.”). *But see, In re Astrolink International LLC, Application for Authority to Construct, Launch, and Operate a Ka-band Satellite System in the Fixed-Satellite Service*, Memorandum Opinion and Order, 17 FCC Rcd 11267 (Int’l Bur. 2002); File Nos. 182 through 186 SAT-P/LA-95 and SAT-MOD-19971222-00200 (waiving Astrolink’s Ka-band construction commencement milestone, contingent upon Astrolink’s entering construction contract by January 2003); Letter from Jack Richards, Keller and Heckman LLP, Counsel to NRTC, to Marlene H. Dortch, Secretary, FCC (Jul. 25, 2002) Attachment at 2 (“The EchoStar/DIRECTV Merger Would Be Disastrous For Rural America”) (suggesting that EchoStar “chose to cease funding its WildBlue Ka-band project” apparently to thwart development of satellite-delivery broadband, and thereby promote the merger).

⁵⁴⁵ See Application of Motorola, Inc. and Teledesic, LLC for Extension of Time Allowed for Commencement of Construction, File No. SAT-MOD-20020131-00012, 17 FCC Rcd 16543 (Int’l Bur., 2002).

launch its first satellite by 2003.⁵⁴⁶ Clearly, the nascent state of this potential future service raises questions and uncertainties both as to the timing and scope of its implementation and as to the quality and price that will be achieved that cannot reasonably be answered at this time. Thus, it is highly speculative whether this alleged merger benefit will come into fruition within a reasonable timeframe.

228. *Merger Specificity.* The Applicants allege that the merger is necessary to allow them to “achieve the necessary economies of scale and scope” to offer satellite broadband services over Ka-band facilities at “price points” competitive with terrestrial broadband alternatives.⁵⁴⁷ In order to capture such economies, the Applicants claim that “one company must have access to a sufficient number of state-of-the-art satellites in relatively close proximity to one another and must have enough spectrum to sustain a critical mass of subscribers” sufficient to “recover the significant up front investment and subscriber acquisition costs associated with launching and marketing [a competitive] two-way broadband satellite service.”⁵⁴⁸ The Applicants “estimate” the necessary “critical mass” to be “at least” five million subscribers in five years.⁵⁴⁹ According to the Applicants, this critical mass “would significantly increase the ability of [New EchoStar] to make the investments necessary to develop advanced services, such as price-competitive high-speed Internet access, and to achieve the scale necessary to spread the fixed costs among a sufficient number of subscribers.”⁵⁵⁰ Opponents contend that Applicants have sufficient spectrum and subscriber base to achieve their alleged benefits without the merger.⁵⁵¹ NRTC raises the

⁵⁴⁶ See, e.g., Letter from John P. Janka, Hughes Electronic Corp. to Magalie Roman Salas, Secretary, FCC, at 16 (Jan. 14, 2002) (file Nos. SAT-MOD-20011221-00135 & 00136); Pegasus Petition at 31-32.

⁵⁴⁷ Application, Eng. Statement at 15. See also Applicants’ Reply Comments at 101 (“As explained in the Application, EchoStar believes that it must achieve at least 5 million broadband subscribers within a five year period in order to recover the significant up-front investment and subscriber acquisition costs associated with launching and marketing a new two-way broadband satellite service.”); Applicants Jun. 13 *Ex Parte* at 2 (“Without the merger, neither firm will likely have a large pool of subscribers to attain the scale—about 5 million broadband subscribers—required to reduce the price to the consumer and thereby effectively compete with cable and DSL broadband offerings.”).

⁵⁴⁸ Application, Eng. Statement at 15 (“ECC and Hughes estimate that at least 5 million subscribers would be necessary in the next 5 years to recover the significant up front investment and subscriber acquisition costs associated with launching and marketing such two-way broadband satellite service.”). See also Application at 47 (“Time to market is of the essence. If next generation satellite broadband services reach the market only after cable and DSL have commanded 60% of potential broadband customers, it is not clear whether any late-coming service would be able to attract enough of the remaining customers to become viable.”); NRTC Petition, Morgan Decl. (disputing Applicants’ 5 million subscriber “critical mass” argument).

⁵⁴⁹ Application, Eng. Statement at 15; Applicants’ Reply Comments at 101; Applicants Jun 13 *ex parte* at 2.

⁵⁵⁰ Application, Willig Decl. at ¶ 25; Application, Eng. Statement at 16 (merged entity will be “able to achieve scale in manufacturing to significantly reduce subscriber terminal costs”); *id.* (“[B]y combining the investments of both companies and standardizing the product, the fixed costs for the system will be reduced by 50%, providing a more competitive and compelling product to the American consumer.”); *id.* at 15-16 (noting efficiencies concerning “ground stations and access gateways, both primary and redundant, as well as the provision of customer support facilities,” and concerning “consumer terminals required for the provision of satellite broadband services”).

⁵⁵¹ NRTC Petition at 54-55. (Applicants own statements and “simple multiplication” show each Applicant can serve from 4.5 to six million subscribers standing alone); NRTC Petition, Morgan Decl., at 2-3, 36-39 (without merger, DirecTV and EchoStar can provide Ka-band broadband service to approximately 7.6 to 14.5 million and 6.6 to 12.7 million subscribers, respectively); NRTC *ex parte* Reply Comments at 9 (noting EchoStar “flip-flop” on ability to provide Ka-band service); Pegasus Petition at 31 (Applicants’ claim “inconsistent with the statements that they have been making to the Commission for several years now—including very recently—that the are each, separately, committed to deployment of broadband satellite systems and have been building separate Ka-band satellites for several years.”); *id.* at 47 (“[I]t is clear that both EchoStar and DIRECTV already are at the forefront in offering competitive broadband services, and that each can and would continue to develop enhanced broadband services on a competitive basis without the merger.”)

most technically-detailed challenge to the Applicants' five million subscribers "critical mass" argument.⁵⁵²

229. Based on the record evidence, we find that the Applicants have failed to demonstrate that the merger will result in cognizable public interest benefits related to satellite broadband service. More specifically, as discussed below, we find that Applicants' benefit claims are speculative and not credible and do not appear to be merger-specific.

230. First, even if we were to accept the Applicants' "critical mass" argument, it is not clear that the ability to combine customers and facilities is a merger-specific benefit. In particular, it is not clear that the benefits of consolidation could not be achieved by other means, such as a joint venture, that would be less likely to have anticompetitive effects.⁵⁵³

231. Second, we find that the merger would generate fewer spectrum efficiencies in satellite Internet access service than it would for DBS service. Because DBS service is a broadcast service sent to all subscribers, the merger will reduce the need to broadcast duplicative channels. Satellite Internet access service, in contrast, requires the use of at least some dedicated spectrum to transmit data and content to and from a particular subscriber.

232. Third, it appears that, absent the merger, DirecTV's Spaceway system could have adequate infrastructure to achieve the "critical mass" of five million residential subscribers in the five years assumed by the Applicants as a requirement for a viable satellite broadband business.⁵⁵⁴ It also appears that EchoStar could potentially approach this assumed critical mass.⁵⁵⁵ This is particularly true when one takes into account the opportunity that each of the Applicants will have in marketing their broadband Internet access service to the 40 million households that they claim currently lack access to DSL and cable modem services.⁵⁵⁶

233. Fourth, we are not convinced by the Applicants' claim that they must achieve a critical mass of five million customers. For example, in calculating the minimum critical mass, the Applicants

⁵⁵² See generally, NRTC Petition, Morgan Decl. at 36-39, Table 14.

⁵⁵³ See, e.g., DOJ/FTC Guidelines § 4 (efficiencies will not be considered "merger specific" if they could be accomplished by other means).

⁵⁵⁴ Staff analyses based on the Applicants' stated capacity suggest that Spaceway could accommodate over 5 million broadband residential subscribers on its two Ka-band satellites at the licensed 99° W.L. and 101° W.L. locations. This is based on the 8.5 frequency reuse factor associated with a processing satellite and the assumption that Spaceway would find a way to exploit the full 720 MHz of bandwidth allocated to FSS for blanket-licensed earth stations at Ka-band, 18.58-18.8 & 19.7-20.2 GHz (space-to-Earth) and 28.35-28.6 & 29.5-30.0 GHz (Earth-to-space). See Applicants Jun. 13 *ex parte*, Attachment at 9.

⁵⁵⁵ There are currently pending before us two petitions concerning Ka-band licenses held by EchoStar that could be used for broadband services. In addition, under the Merger Agreement, EchoStar has the option to purchase PanAmSat from Hughes if the merger is terminated under certain circumstances. Favorable action on the pending petitions, together with the PanAmSat assets, would, according the FCC staff analyses, leave EchoStar able to serve close to 4 million residential subscribers on these three satellites. This is based on the frequency reuse factor of 4 associated with bent pipe satellites and the assumption that the full 720 MHz Ka blanket-license band would be exploited for the two satellites that could do so (only 500 MHz of bandwidth is licensed to EchoStar at 121° W.L.). See also n.23, *supra*; Applicants Jun. 13 *ex parte*, Attachment at 9. Additional residential subscribers could be served through joint ventures with other Ka-band licensee like WildBlue, KaStar, or others.

⁵⁵⁶ See, e.g., Applicants Jun. 13 *ex parte*, Attachment at 44 ("About 40 million households currently unserved by cable modem or DSL.")

assumed that the average monthly broadband service fee would be **REDACTED**.⁵⁵⁷ The Applicants, however, present no convincing evidence that this is the likely market rate. If the actual monthly revenue were higher, the minimum critical mass would be less than five million. In addition, in estimating revenue, the Applicants include **REDACTED**. Making this adjustment would likewise lower the critical mass below five million. Thus, the minimum viable customer base is likely to be significantly below five million subscribers for an integrated MVPD and broadband operator.

234. Finally, we give little credit to the Applicants' claims that the merger will generate efficiencies due to the consolidation of "advertising and promotion budgets and . . . distribution channels," as well as the "customer service centers, uplink facilities, network operating centers, trunking facilities and billing functions."⁵⁵⁸ We discount these efficiencies arguments because the efficiencies alleged here relate to fixed rather than variable costs, and therefore are unlikely to counteract any anticompetitive effects of the merger.⁵⁵⁹

235. In summary, the record does not support the Applicants' claim that the provision of satellite broadband services should be considered a public interest benefit of the merger. We cannot emphasize strongly enough the potential value of broadband Internet access services to every community and citizen in the country. Applicants, however, have failed to demonstrate that their proposed merger is either more likely than not to hasten the delivery of satellite broadband services, or is necessary to achieve this important public interest benefit. Specifically, they have failed to demonstrate that this claimed benefit is non-speculative and incapable of being achieved through other means.

236. *Potential Public Interest Harms.* Although Applicants argue that the merger will benefit competition in the Internet access service market, Opponents contend that the merger will instead harm competition in that market by eliminating existing Ku-band competition, particularly in rural areas where satellite-provided Internet access services are the only option for residential consumers,⁵⁶⁰ and limiting competition in the provision of next-generation, Ka-band satellite-provided broadband Internet access service. Under Commission precedent, the burden of persuasion is on the parties proposing the transfer of a license or authorization to show that the potential public interest benefits of the transfer outweigh the potential public interest harms.⁵⁶¹ On the record before us, we cannot find that the Applicants have met this burden.

237. *Ku-band Internet Access Services.* Opponents argue that the merger will eliminate competition in the current market for Ku-band satellite Internet access service by combining the only two facilities-based providers of that service – Starband and DirecWay.⁵⁶² Such a monopoly, Opponents

⁵⁵⁷ Letter from Pantelis Michalopoulos, Esq. on behalf of EchoStar and Gary M. Epstein, Esq. on behalf of Hughes to Marlene Dortch, Secretary, FCC (July 30, 2002) Tab A, at 2 ("Applicants July 30 *ex parte*").

⁵⁵⁸ Applicants' Reply Comments at 107.

⁵⁵⁹ See *DOJ/FTC Guidelines* §4.

⁵⁶⁰ See, e.g., NRTC Petition at 42-56; NRTC *ex parte* Reply Comments at 15-16, n.35; NAB Petition at ii, 98-104 (merger will reduce rural consumers' only choice for broadband services now and in the future); NRTC Response at iv, 2-3 (same effect for estimated 25 million rural consumers); Pegasus Petition at 30 (merger will eliminate satellite broadband competition by removing current rural broadband choices and reducing future choices).

⁵⁶¹ See, e.g., *Bell Atlantic-NYNEX Order*, 12 FCC Rcd at 20063 ("Applicants bear the burden of showing both that the merger-specific efficiencies will occur, and that they sufficiently offset any harms to competition such that we can conclude that the transaction is pro-competitive and therefore in the public interest."); *SBC-Ameritech Order*, 14 FCC Rcd at 14825 (same).

⁵⁶² NRTC Petition at 50 ("For these existing Ku-band services, the combination of EchoStar and Hughes would constitute a merger to monopoly [in areas not served by cable modem or DSL.]; *id.* at 51 (For foreseeable future, Starband and DirecWay are the only choices for many rural markets without cable modem or DSL service, and

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claim, would result in higher prices, degraded service, and decreased innovation, particularly in rural areas where no alternative to Ku-band Internet access service exists.⁵⁶³

238. Applicants argue that the Ku-band Internet access service market is not viable without the merger, and, in any event, harm to that market will be prevented by the Applicants' promise to impose the same monthly fees nationally.⁵⁶⁴ For example, the Applicants note that the \$60 to \$70 monthly fee for existing satellite-provided broadband Internet access service, is "significantly" higher than monthly fees for cable modem and standard DSL service, which can be as low as \$30 and \$45, respectively.⁵⁶⁵ They claim that the same is true for equipment and installation costs, which are more than \$700 for satellite-provided broadband Internet access services, compared to less than \$200 or \$250 for some cable modem and DSL providers, respectively.⁵⁶⁶ The Applicants note that some DSL service providers charge no installation fees at all.⁵⁶⁷

239. The record indicates that harm to existing Ku-band Internet access service will primarily occur in areas not served by cable modem or DSL facilities because such service may not be "reasonably interchangeable" with cable modem or DSL broadband Internet access services.⁵⁶⁸ Our ability to conclusively evaluate the impact of the proposed merger on the provision of satellite Internet access service using Ku-band spectrum, however, was complicated by EchoStar's announcement on April 4, 2002, that it was withdrawing its support from and surrendering its control of Starband's Ku-band project because it judged that service not viable.⁵⁶⁹ NRTC argues that EchoStar's actions were intended to

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therefore merger will "eliminate competition entirely in these markets, leading to monopoly pricing for the only technology capable of meeting demand for rural broadband services."); NRTC *ex parte* Reply Comments at 30-31, n.75 (Arguing that "combined New EchoStar would, as a rural broadband monopoly . . . increase[e] prices, as there would be no competitor to constrain prices in [] areas [without competition]."); *id.* at 32-33 ("For rural America, New EchoStar would enjoy a broadband monopoly."); NAB Petition at ii ("Consumers in [areas without other broadband options] will be at the mercy of a monopolist for broadband Internet access."); *id.* at 102 ("DIRECTV/Hughes and EchoStar through its equity interest in StarBand™ control the only two satellite broadband products available today."); *id.* at 103 ("[T]he merger will actually snuff out existing competition" for existing service in rural America); Pegasus Petition at 30 ("This merger will eliminate current choices in satellite broadband.")

⁵⁶³ For example, NAB notes that competition between the Applicants must "flourish" in order to "provide rural America with the most cost-effective and up-to-date broadband service." NAB Petition at 101.

⁵⁶⁴ See Applicants' Reply Comments at 118.

⁵⁶⁵ *Id.* at 93.

⁵⁶⁶ *Id.* at 93-94.

⁵⁶⁷ *Id.* at 94.

⁵⁶⁸ See, e.g., Applicants' Reply Comments at iv ("The two companies' current broadband offerings are expensive 'niche' products that are hampered by several constraints, do not even satisfy the Commission's definition of an 'advanced service,' and have attracted fewer than 150,000 subscribers combined."); *id.* at 85 ("[S]atellite broadband today is not fully comparable to cable modem and DSL, leaving many Americans without a true broadband alternative."); *id.* at 90-95; NRTC *ex parte* Reply Comments at 24 (noting the Applicants' complaint "that their Ku-band service offerings are subject to constraints on transmission speeds, capacity and overall costs," but arguing that "[w]hile this may or may not be true, the Merger is not the right vehicle to correct these purported shortcomings.")

⁵⁶⁹ See *EchoStar Stops Backing StarBand After \$100 Million Investment*, Satellite Week (Apr. 8, 2002). See also, *StarBand Accepts Registration of EchoStar Board Members*, Communications Daily (May 8, 2002) (noting May 5, 2002, resignation of four EchoStar-appointed members from seven-person board). In the wake of EchoStar's withdrawal, StarBand filed for Chapter 11 bankruptcy protection, a move that StarBand claimed was necessary because EchoStar was withholding StarBand's customer records. See Yuki Noguchi, *StarBand Files for Chapter 11; Firm Drops Suit Against EchoStar*, Wash. Post (June 1, 2002) at E1 ("Since [February, 2002], StarBand has

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promote the merger.⁵⁷⁰ Similarly, after the Merger Application had been filed, DirecTV stated that it “is unlikely to continue to fund its residential satellite broadband service without the merger.”⁵⁷¹ We view such self-serving statements with skepticism, however, particularly in the absence of objective supporting evidence.⁵⁷² Applicants have done nothing to rebut NRTC’s claims that their actions with respect to Ku-band Internet access service are no more than self-fulfilling prophecies that continued provision of the service is not possible without the merger. The Applicants’ actions and statements could well be designed to bolster their claims that satellite Internet services are not viable absent the merger. In sum, the single most potent harm to Ku-band Internet services may be the pendency of the merger itself.

240. Finally, to the extent that the Applicants are correct concerning the importance of a larger subscriber base and the ability to bundle video and broadband services on a single satellite dish, Starband may have difficulty in the future competing effectively with DirecWay, due to the loss EchoStar’s funding and subscriber base together with the flexibility to provide a “one-dish” solution that EchoStar’s DBS orbital slots would provide. EchoStar’s actions toward Starband following announcement of the merger arguably raise questions whether different actions might have been, or might be, taken if the merger does not go forward.⁵⁷³ Thus, we find that the record indicates that the proposed

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been unable to collect revenue from about 31,000 of its 41,000 customers, according to [StarBand’s bankruptcy filing.]”). According to StarBand’s President, David Trachtenberg, “EchoStar, which had control of StarBand’s board, was creating obstacles to StarBand’s growth by stymieing funding efforts and business plans.” *Id.* At the time of its bankruptcy filing, StarBand claimed that remained operational. *Id.* (“[StarBand’s] network is up and running, customers are getting service, dealers can order products, and employees are still getting paid.”). On June 20, 2002, StarBand announced that it had reached a settlement with EchoStar, pursuant to which “EchoStar will pay StarBand \$710,000 and hand over service records for 16,000 retail StarBand customers,” and will “pay StarBand a \$35-a-month fee for each of the 15,000 customers it sold service to under a previous wholesale agreement.” *See* Yuki Noguchi, *StarBand, EchoStar End Their Dispute; Fight Over Billing Settled Out of Court*, Wash. Post (Jun. 21, 2002) at E5. The settlement also requires EchoStar to give up its right to block or veto any future funding or business decisions for StarBand. *Id.* In return, StarBand agreed not to publicly disparage EchoStar and issued an apology to EchoStar chairman and CEO Charles Ergen for posting his email on StarBand’s website. *Id.* The settlement was to become effective upon approval by a bankruptcy judge. Before the settlement, EchoStar was expected to lose its 30 percent ownership of StarBand during the course of the bankruptcy proceeding. *See supra*, Noguchi, *StarBand Files for Chapter 11*.

⁵⁷⁰ Letter from Jack Richards, Counsel for NRTC, to Marlene H. Dortch, Secretary, Federal Communications Commission (July 23, 2002), Attachment at 2. After withdrawing its support, EchoStar initially withheld Starband’s customer records, thereby preventing Starband from collecting revenue from about 31,000 of its 41,000 customers. This action led Starband to sue EchoStar, but the lawsuit was subsequently withdrawn when Starband filed for bankruptcy on July 31, 2002 *See* Yuki Noguchi, *StarBand Files for Chapter 11; Firm Drops Suit Against EchoStar*, Wash. Post (June 1, 2002) at E1. *See also* Andy Pasztor, *StarBand Files For Bankruptcy, Blaming EchoStar*, Wall St. Journal (June 3, 2002) at B5.

⁵⁷¹ *See* Applicants Jun. 13 *ex parte* at 6.

⁵⁷² *See, e.g., In re Applications of Ameritech Corp., Transferor, and SBC Communications Inc., Transferee, For Consent to Transfer Control of Corporations Holding Commission Licenses and Lines Pursuant to Sections 214 and 310(d) of the Communications Act and Parts 5, 22, 24, 25, 63, 90, 95 and 101 of the Commission’s Rules*, 14 FCC Rcd 14712, 14750 (1999) (“Although Ameritech minimizes the competitive significance of its own independent entry absent the merger, the preponderance of the evidence demonstrates that Ameritech’s portrayal is self-serving.”) (citing *id.*, Appendix B (Summary of Confidential Information and Conclusions)).

⁵⁷³ One industry observer noted that Starband’s bankruptcy filing had “potentially important implications for the satellite industry because it’s the first time a federal court will hear claims that EchoStar used unfair and even illegal tactics to boost its proposed takeover of Hughes Electronics Corp., parent of DirecTV.” Andy Pasztor, *Starband Files For Bankruptcy*. Further exacerbating our inability to predict how Starband will fare in competition with DirecWay post-merger is the fact that EchoStar may have effectively purchased Starband’s silence in this

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merger appears more likely to harm existing competition in the provision of Ku-band Internet access market than it is to benefit this market.

241. *Ka-band Broadband Internet Access Services.* The anticipated broadband Internet access services to be provided over next-generation, Ka-band facilities present somewhat different issues. On the one hand, the gestational character of these as yet un-deployed services, combined with rapidly developing technology in this area, make it difficult to define markets or market participants with any confidence, and thus to predict the existence or magnitude of any alleged harms or benefits to consumers as a result of the merger. At the same time, the record suggests that the merger could have significant anticompetitive effects.

242. Opponents argue that the merger will harm future competition in the provision of Ka-band broadband Internet access services.⁵⁷⁴ NRTC argues that the merger will stifle anticipated competition in such Ka-band services by *adding* barriers to entry faced by potential entrants.⁵⁷⁵ Opponents further allege that giving the Applicants the most valuable Ka-band orbital slots will deter competitive entry.⁵⁷⁶ Applicants contend that Opponents are mistaken that the merger “will ‘stifle’ Ka-band competition, or ‘prevent Ka-band competition from emerging in rural areas.’”⁵⁷⁷ The Applicants maintain that this is the case because “there are more than enough prime Ka-band slots controlled by others to ensure that the merger will not “stifle” competition in providing broadband services.” Further, they argue that, in any event, “the Commission has observed that new entrants using several different technology platforms have already begun, or are poised to begin, playing a significant role in providing high-speed and advanced services to many areas of the country including smaller markets.”⁵⁷⁸

243. We consider the competitive effects of anticipated next-generation Ka-band services to better assess Applicants’ claims about benefits, but our discussion of potential harms in this area is necessarily limited by the fact that Ka-band broadband Internet access services are not currently on the market. Thus, our analysis, like the claimed broadband benefit itself, is somewhat speculative. NRTC’s alleged harm of additional barriers to entry, however, appears even more likely to occur if we assume, for purpose of this analysis, that a bundled MVPD/broadband service is as important to consumers as the Applicants claim.⁵⁷⁹ Indeed, if the ability to offer a bundled MVPD/broadband service proves important

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proceeding. *See* Yuki Noguchi, *StarBand, EchoStar End Their Dispute; Fight Over Billing Settled Out of Court*, Washington Post (June 21, 2002) at E5 (“Starband also agreed not to publicly disparage EchoStar . . .”).

⁵⁷⁴ *See* NRTC Petition at 53-54 (merger would “stifle competition, squander scarce and valuable spectrum resources and deter any new competition in the foreseeable future”).

⁵⁷⁵ *See Id.* at 54. Commenters also argue that the merger will remove the Applicants’ motivation to continue to innovate with regard to these services. *See* NAB Petition at 61 (“The loss of an innovation incentive also will significantly affect the development and deployment of advanced services, like interactive video programming and broadband Internet, via satellite—a primary goal of the Telecommunications Act of 1996.”)

⁵⁷⁶ *See Id.* at 52-56; 55 (potential competitors “will not be able to raise funding in the face of the EchoStar/Hughes/PanAmSat six-pack of satellites.”).

⁵⁷⁷ Applicants’ Reply Comments at 109; *id.* at 109-114. Applicants further argue that the merger is preferable to a “complicated web of regulations” that the Applicants allege will be required to achieve universal broadband deployment absent the merger. *Id.* at 115.

⁵⁷⁸ *Id.* at 109-10 (sufficient “prime” Ka-band slots) & 111 (new entrants with alternative technologies).

⁵⁷⁹ *See, e.g.*, Application at 6-7; Pegasus Petition at 34 (since consumers increasingly demand “bundled package of video and broadband,” the “inability of other firms to offer satellite video services would inhibit new broadband entry.”).

to consumers, then Pegasus may be correct that “the creation of a DBS video monopolist – New EchoStar – would result in a de facto satellite broadband monopolist as well.”⁵⁸⁰

244. However, we cannot make this ultimate determination on the record before us. For example, we do not know whether Ka-band broadband Internet access service will actually be reasonably interchangeable with terrestrially-provided alternatives.⁵⁸¹ Similarly, the fluid state of broadband Internet access service technologies prevents our determining whether potential entrants, beyond the field of anticipated Ka-band broadband Internet access service providers, would challenge what Opponents claim would be the unassailable dominance of New EchoStar with respect to the broadband Internet access market in many areas of rural America.

245. Moreover, for reasons similar to those discussed in connection with the MVPD market, the Applicants have not demonstrated that the likely potential harms to existing or future Internet access service competition can be ameliorated through a national pricing scheme.⁵⁸² The Applicants have provided scant evidence of what they mean by “national” pricing for satellite broadband services. For example, the Applicants have not defined the difference between “basic” broadband Internet access services—for which a \$35 monthly fee is predicted – and “non-basic” broadband Internet access services.⁵⁸³ Nor have they explained the dramatic drop from current to future predicted pricing levels for satellite-delivered Internet access service. Moreover, as NRTC points out, the Applicants have left “many unanswered questions about the implementation, governance and enforcement of a national broadband pricing plan.”⁵⁸⁴

246. Finally, the record and Applicants’ own submissions suggest that the proposed merger may not in fact result in the Applicants’ increased ability to offer a bundled satellite MVPD/broadband service capable of competing head to head with the voice/video/data bundle of services being deployed by some of the largest cable MSOs, or the video/data bundled being deployed by the vast majority of cable MSOs. For example, the Applicants have noted that “[c]able systems that have gone to 100% digital programming have an effective throughput of 4.47 Gbps, and when they upgrade from 750 MHz transmissions to 1250 MHz transmissions they will have an effective throughput to the home of 8.94 Gbps.”⁵⁸⁵ In response to such anticipated digital cable capacity, the Applicants argue that “[t]he merger

⁵⁸⁰ Pegasus Petition at 34-35. *Accord*, NRTC *Ex Parte* Reply Comments at 36 (MMDS operators unlikely to “bundle MVPD and broadband” and “[m]ore fundamentally, no MMDS operator has announced plans to provide bundled services using the MMDS spectrum.”).

⁵⁸¹ Estimated timelines for the deployment of Ka-band broadband Internet access services have slipped before. *See, e.g., AT&T-MediaOne Order*, 15 FCC Rcd at 9868-69 (noting Spaceway’s expectation to begin operations in 2002).

⁵⁸² *See supra* Section V.B.4.

⁵⁸³ *See* NRTC *Ex Parte* Reply Comments at ¶ 17 (no definition of “basic” and “non-basic” broadband services); Applicants Reply Comments at 118 (“New EchoStar will commit to a nationwide pricing policy for basic broadband services that will translate effective competition in urban areas into benefits to all households for broadband service, just as it will for MVPD services.”); Applicants Jun. 13 *Ex Parte* (promising a “target price of \$35 or lower for basic monthly broadband service, *uniformly applied throughout the nation.*”) (emphasis added). The Applicants’ failure to specify uplink and downlink speeds for its “basic” service is inconsistent with DirecTV’s public statement, after the merger application was filed, that Spaceway’s Ka-band system would “far exceed the FCC’s standard for advanced services” by providing “super-fast download speeds of starting at 30 Mbps and uplink rates from 512 Kbps for the smallest earth terminals for *individual users*, and from tens of Mbps for *businesses* and hubs.” National Telecommunications & Information Administration, Deployment of Broadband Networks and Advanced Telecommunications, Docket No. 011109273-1273-01, Late Filed Comments of Hughes Network Systems, available at <http://www.ntia.doc.gov/ntiahome/broadband/>.

⁵⁸⁴ NRTC *ex parte* Reply Comments at 21-22.

⁵⁸⁵ EchoStar May 16 *ex parte* at 3.

will help address this competitive disadvantage by . . . providing the merged entity with an aggregate throughput of approximately 2.9 Gbps for all national programming, and a satellite “pipe” to the home of approximately 2 Gbps after accounting for capacity dedicated to local broadcast channels.”⁵⁸⁶ We find it unlikely that the merger will result in spectrum efficiencies (from avoiding duplication) similar to those alleged in the MVPD context, because the spectrum used for broadband Internet access service is finite and must be apportioned to individual subscribers individually.⁵⁸⁷ We note that cable modem service “typically delivers information to end users at speeds in excess of 2 Mbps.”⁵⁸⁸ Moreover, by emphasizing a benchmark for “advanced services” of *at least* 200 Kbps in both directions, the Applicants essentially ignore that “in future years, the appropriate definition of broadband service may change as technology improves and consumer demand grows for more features and functions from residential broadband service.”⁵⁸⁹ In other words, we have no way of discerning whether the appropriate benchmark for “true” broadband connection speeds will exceed that proposed by the Applicants before the end of the five-year period alleged as crucial for obtaining a “critical mass” of five million subscribers.

247. *Conclusions.* We therefore conclude that the Applicants have not demonstrated that the claimed broadband service benefits are likely to occur and that the merger is necessary to realize them. Applicants’ position that the merger will result in increased deployment of satellite broadband services is based primarily on the projected provision of broadband Internet services using Ka-band spectrum. Such services, however, are not only nascent, in nearly every case they are months, if not years, away from public availability. The facilities to provide broadband Internet access service using Ka-band spectrum are not yet deployed. Substantial uncertainties remain as to the likely quality and prices of such service. Moreover, Applicants have failed to demonstrate that the promised benefits, even if technically and economically achievable, could not be achieved without the merger. It is not clear that one or both of the Applicants would not be able to individually fund their satellite broadband projects without the merger, or that the cost savings and efficiencies alleged by the Applicants could not be achieved through other means, for example by the adoption of open technological standards or by recovering capital costs through revenues from enterprise broadband Internet access services.⁵⁹⁰ Finally, Applicants have not

⁵⁸⁶ *Id.*, Attachment, “Post-Merger Bandwidth Comparison: Fat Pipe Model.”

⁵⁸⁷ See, e.g., NAB Petition at 106 (“The information each consumer requests via the Internet is unique, and the information downloaded as a result is equally unique.”). As NAB observes, “[t]he broadband capacity needed to offer this ‘programming’ to each consumer will not change whether the merger takes place or not.” NAB Petition at 106. Although the merger may result in some fixed cost savings to the Applicants, such savings (unlike variable costs) are less likely to be cognizable in the context of competition analysis. Moreover, the Applicants have not demonstrated that any cost savings in the provision of satellite-provided broadband Internet access services will inure to the benefit of residential subscribers.

⁵⁸⁸ *Third 706 Report* at 2865. *Id.*, Appendix B at 2917-18 (“Under optimal conditions, an upgraded cable system can provide maximum downstream speeds of 27 Mbps and maximum upstream speeds of 10 Mbps, more than sufficient to qualify as advanced telecommunications capability.⁴²² In practice, however, cable transmission speeds typically range from 500 kbps to 1.5 Mbps.”).

⁵⁸⁹ *Third 706 Report* at 2850. In the *Third 706 Report* we noted our belief that “services at speeds over 200 Kbps and 2 Mbps are currently available through traditional wireline offerings—though most often deployed to businesses—and we concluded that the information we require respondents to report [with respect to these benchmark connection speeds] will enable us to detect the *evolution of supply and demand for such future generations of broadband.*” (emphasis added). See also Gartner Dataquest, *Gartner Dataquest Says Implementation of “True” Broadband Could Bolster U.S. GDP by \$500 Billion a Year* (Aug. 26, 2002) (“While many consumers associate the term broadband with the typical 384 kbps downstream that service providers offer today, Gartner Dataquest defines ‘true’ broadband as broadband to the home with aggregate downstream capability of a minimum of 10 Mbps.”).

⁵⁹⁰ See, e.g., Peter J. Brown, *Two-Way Service But No Standards, No Interoperability*, *Broadband Week* (Jan. 22, 2001) available at http://www.broadbandweek.com/news/010122/010122_wireless_return.htm (visited Sep. 10, 2002) (“Proprietary system have to disappear from the satellite industry in order to build scale. Scale means

(continued....)

demonstrated that the potential harms to broadband markets from additional concentration of important assets and inputs resulting from the merger would either be insubstantial or could be cured by a national pricing commitment. Thus, in our overall balancing of potential public interest harms and benefits, we will afford little weight to this alleged merger benefit, even absent our determination that the proposed transaction appears more likely to harm than to benefit the markets for both narrowband and broadband satellite-delivered Internet services.

VI. OTHER ISSUES

A. Vertical Effects

1. Potential Harms in the Video Programming Market

248. *Introduction.* In this section, we consider the effects of the merger on the market for the sale of video programming, delivered via satellite or terrestrial technologies, in the form of networks. We have described the video programming market extensively in our previous orders.⁵⁹¹ Companies that own programming networks both produce their own programming and acquire programming produced by others.⁵⁹² These companies then package and sell this programming as a network or networks to MVPD providers for distribution to consumers.⁵⁹³ MVPDs purchase programming and combine it with transport on their cable, satellite, or wireless distribution networks to provide delivered video services to subscribers.

(...continued from previous page)

volume, and volume means lower costs. . . . DVB-RCS is available, and numerous other companies are building to it.”) (quoting Robert Bucher, President, Canadian company Norsat International); EMS Technologies, Inc., 2001 Annual Report at 5 (“The intent of an open standard is to speed market growth by lowering the cost of broadband service to customers, service providers and hardware suppliers.”) *available* at http://www.elmg.com/investors/annual_report_2001/AnnRpt.pdf. EMS has noted that a number of companies developing next generation systems had sponsored Digital Video Broadcast – Return Channel System (DVB-RCS) standard, “in an attempt to arrive at an open standard.” See *EMS Technologies, Satellite Broadband* at <http://www.ems-t.com/STG/broadband/dvb-rcs.asp>. EMS notes that “[t]he intent of an open standard is to accelerate economies of scale, thereby generating lower-cost solutions and opening the market in a shorter timeframe than could be possible with competing proprietary solutions,” including that used by HNS and Gilat. *Id.* The Applicants note that “[s]erving the enterprise sector provides the opportunity for [Spaceway] to recover more quickly the enormous capital cost of deploying this system; conversely, focusing on a ubiquitous residential service is a far riskier endeavor that would take far longer to recover such costs.” Applicants’ Reply Comments at 98. The Applicants do not explain, however, what mix of enterprise/residential service would allow Spaceway to recoup capital costs while still providing service to a significant number of residential subscribers. Moreover, the Applicants do not explain why Ka-band spectrum could not be reasonably apportioned between the peak hours for enterprise and residential, since they differ.

The Applicants might also take advantage of the \$20 million in grants that are available, through the Department of Agriculture’s Rural Utility Service (RUS) Broadband Pilot Grant Program for broadband transmission service in rural America. See, e.g., *Notices, Dept. of Agriculture, Forest Serv. Siuslaw Resource Advisory Comm. Meeting, Monday, July 8, 2002*, 67 Fed. Reg. 45079, 2002 WL 1446457 (\$20 million available for fiscal year 2002 for proposals to provide broadband transmissions on a “community oriented connectivity basis.”), *available* at <http://www.rurdev.usda.gov/rd/nofas/2002/bbpgp070802.pdf>.

⁵⁹¹ See, e.g., *Implementation of Section 11 of the Cable Television Consumer Protection and Competition Act of 1992, Implementation of Cable Act Reform Provisions of the Telecommunications Act of 1996, the Commission’s Cable Horizontal and Vertical Ownership Limits and Attribution Rules, Review of the Commission’s Regulations Governing Attribution of Broadcast and Cable/MDS Interests, Review of the Commission’s Regulations and Policies Affecting Investment in the Broadcast Industry, Reexamination of the Commission’s Cross-Interest Policy*, 16 FCC Rcd 17312 (2001) (“*Ownership Further Notice*”).

⁵⁹² *Id.* at 17321-22.

⁵⁹³ *Id.*

249. Participants in the market for the packaging of video programming consists of entities of various sizes, from unaffiliated packagers that own one programming network to large corporations, such as AOL Time Warner and Viacom, that own many 24-hour networks.⁵⁹⁴ We understand that the video programming networks sell programming to MVPDs based on contracts generally lasting several years.⁵⁹⁵ Video programmers are compensated in part through license fees that are based on the number of subscribers served by the MVPD. These license fees are negotiated based on “rate cards” that specify a top fee, but substantial discounts are negotiated based on the number of MVPD subscribers and on other factors, such as placement of the network on a particular programming tier.⁵⁹⁶ Most video programmers also derive revenue by selling advertising. Advertising time on programming networks is generally split between the programmer and the MVPD.⁵⁹⁷

250. Some programming networks offer programming of broad interest and depend on a large, nationwide audience for profitability; others also seek large nationwide audiences but offer content that is more focused in subject; yet others still seek nationwide distribution, but offer narrowly tailored programming, focusing on a “niche within a niche.”⁵⁹⁸ Some programming networks do not seek a national audience but are regional or even local in scope, including regional sports and news networks. Some programming networks likely can survive with distribution to a few million subscribers within a certain region, while others may need nationwide distribution to a large percentage of MVPD homes in order to remain viable.⁵⁹⁹ Program packagers seek to reach the widest range of subscribers for their type of programming on a regional or national basis to increase the value of their programming to advertisers, and to build brand recognition that will in turn spur other MVPDs to carry their programming and allow them to reach yet more subscribers.⁶⁰⁰

251. If the transaction is approved, New EchoStar will be the only major DBS purchaser of video programming, one of the largest MVPD purchasers, and the only major MVPD purchaser with a national footprint. CWA states that, as a result, prices will increase for program providers and program distributors.⁶⁰¹ It argues that program providers and distributors will have no alternative but to sell to New EchoStar, since it will be the largest national distributor of MVPD programming, with more than 17 million customers.⁶⁰² NAB claims that broadcasters will be harmed because they will have weakened power to negotiate retransmission consent terms.⁶⁰³

252. ACA claims that New EchoStar will exert bottleneck control over programming, thereby allowing it to harm small cable systems with which it competes. ACA states that today EchoStar refuses

⁵⁹⁴ *Id.*

⁵⁹⁵ *Id.* at 17322.

⁵⁹⁶ *Id.*

⁵⁹⁷ *Id.*

⁵⁹⁸ *Id.* at 17322-23. Examples of the first type of programming include TNT and USA; examples of the second type include ESPN for sports and CNN for news; and examples of this third type of programming include Discovery Health, the Golf Network, and Home and Garden.

⁵⁹⁹ *Id.* at 17323.

⁶⁰⁰ *Id.*

⁶⁰¹ CWA Petition at 2. Although CWA argues that program distributors will pay an increased price to New EchoStar, we note that almost all program distributors are paid by DBS and other MVPD providers. We take CWA’s argument to mean that program producers and distributors will receive less for their programs money after the merger because of New EchoStar’s market power.

⁶⁰² *Id.*

⁶⁰³ NAB Petition at 57-58.

to negotiate with small cable systems regarding program distribution, although DirecTV does enter into “dish-overlay” arrangements on a limited basis. Under these arrangements, the small cable company installs a DBS dish on a subscriber’s home. The subscriber then receives some programming via cable and some via the satellite dish. In markets where DBS does not deliver broadcast signals, and where low density of cable subscribers cannot support a system upgrade, such an arrangement enables rural consumers to receive expanded programming.⁶⁰⁴ ACA argues that New EchoStar, which will be the only major provider of DBS services, will be able to refuse to enter these overlay arrangements, or do so on onerous terms, in order to drive small cable systems out of business and achieve a monopoly.

253. Applicants respond that, contrary to the Opponents’ arguments, the proposed merger will enhance performance in the programming market because the additional spectrum made available through the elimination of their duplicate programming carriage will allow New EchoStar to serve as an outlet for new programming services.⁶⁰⁵ Applicants disavow any intent to pursue a strategy of vertical integration with programmers and claim that the merged entity will serve as an important outlet for promoting the development of new independent programming services.⁶⁰⁶ Regarding retransmission consent, the Applicants disagree with NAB, and insist that broadcasters can always rely on must-carry and can use the existence of competitive cable systems as a bargaining tool.⁶⁰⁷ Moreover, the Applicants claim that the merger is necessary to promote competition among MVPD providers for programming in light of cable and broadcast consolidation, such as the proposed AT&T–Comcast merger.⁶⁰⁸

254. *Discussion.* Opponents raise two areas of concern. The first is the exercise of monopsony buying power. The second is the possibility of vertical foreclosure (e.g., refusing to provide programming to a rival cable system). We address each in turn.

255. With regard to monopsony power in the market for programming, the economic literature does not identify a single point at which monopsony power becomes likely. In general, large purchasing power delivers both benefits and potential costs to consumers. The benefits come from the fact that large MVPDs that receive programming discounts may pass on some of these reduced costs to subscribers (for example, in the form of lower prices). The potential cost to consumers comes from the fact, discussed further in the next paragraph, that these discounts may discourage or preclude competitive entry, and thereby result in higher prices or reduced service quality.⁶⁰⁹ If we were to approve the transaction, New EchoStar would become either the first or the second largest purchaser of video programming,⁶¹⁰ and, according to the Applicants, would pay less for programming costs than before the merger.⁶¹¹ The new

⁶⁰⁴ ACA Petition at 16-18.

⁶⁰⁵ Applicants’ Reply Comments at 118-119. *See also* Application at 6, 29.

⁶⁰⁶ *Id.* at 6.

⁶⁰⁷ Applicants’ Reply Comments at 129.

⁶⁰⁸ *Id.* at 125-26.

⁶⁰⁹ *See generally* Chipty, Tasneem, “Horizontal Integration for Bargaining Power: Evidence From the Cable Television Industry,” *Journal of Economics & Management Strategy*, Vol. 4, Summer 1995. At 375-397; Ford, George S. and John D. Jackson, “Horizontal Concentration and Vertical Integration in the Cable Television Industry,” *Review of Industrial Organization*, Vol. 12, at 501-518; Waterman, David and Andrew A. Weiss, *Vertical Integration in Cable Television*, The MIT Press and The AEI Press, 1997, especially Chapter 7 (“Waterman and Weiss (1997)”); and Shooshan, Harry M., “Cable Television: Promoting a Competitive Industry Structure,” in *New Directions in Telecommunications Policy: Volume 1, Regulatory Policy: Telephony and Mass Media*, Paula R. Newberg, ed., Duke University Press, 1989, at 222-246.

⁶¹⁰ If we approve the license transfers involved in the pending merger between AT&T Corp. and Comcast Corp., MB Docket No. 02-70, AT&T Comcast Corp. will become the country’s largest MVPD provider.

⁶¹¹ We have addressed Applicants’ claims about the extent of their lower programming costs, *supra*.

entity, however, would only represent slightly more than 20 percent of the total purchases of video programming. Twenty percent is well below levels of concentration at which the Commission historically has had cause for concern.⁶¹² Also, with regard to both national and regional programming, there are several other large and many smaller venues (chiefly other MVPD providers) through which programmers can distribute their programming. We therefore find no basis on this record to conclude that New EchoStar would be able to exercise monopsony power over national and regional programmers.

256. The situation would be different, however, with regard to programmers attempting to reach some niche audiences, those who live in low density areas, many of which are rural. As described above, such viewers would have few choices of MVPD providers and many would be reduced to a single provider if we were to approve the transaction. New EchoStar would effectively be the only MVPD provider to between 4% and 21% of the population. It would face competition only from low-capacity cable systems for another substantial segment of the population. Such cable systems, because they have low capacity that is already filled by established networks, would be unlikely to carry new program networks. Thus, if there were programmers that wished to focus on audiences in low density areas, New EchoStar would effectively provide the only outlet for their programming. For these niche programmers, New EchoStar would indeed be able to exercise monopsony power and could be the “gatekeeper” that some commenters have described. On the other hand, it may also be true that without the capacity freed up by the consolidation of the Applicants’ satellites, neither DirecTV nor EchoStar would carry these niche programs, instead using their resources to carry programs with broader reaches. Moreover, it may be that the audience that lives in low density geographic areas do not form an identifiable niche. For example, there may be many “rural” viewers who live in areas served by high capacity cable systems, and thus a programmer attempting to reach “rural” audiences may have alternative outlets from which to choose. The record contains insufficient evidence for us to determine the precise impact of the transaction on the niche programmers described in this paragraph, and accordingly, we designate this question for hearing.

257. The second concern involves the possibility of vertical foreclosure. As described in the Background section, Vivendi, an owner of programming networks, will own approximately five percent of New EchoStar if the merger occurs. In return for its investment, Vivendi has secured five of EchoStar’s channels. The agreement between EchoStar and Vivendi is non-exclusive, *i.e.*, EchoStar is not contractually prohibited from carrying networks that compete with Vivendi, and Vivendi is not prohibited from being carried by other MVPD providers. Vertical foreclosure concerns in this case therefore involve two possibilities: Vivendi discriminating against New EchoStar’s rivals, and New EchoStar discriminating against Vivendi’s rivals.

258. In theory, Vivendi could deny its programming to rivals of New EchoStar in order to induce consumers to switch to New EchoStar. In order for this strategy to be profitable, the profits Vivendi would lose by discriminating against other MVPD providers would have to be more than offset by the increase in Vivendi’s share of the profits that New EchoStar would earn from the new customers it would gain as a result of the discrimination. However, Vivendi would bear the full cost of the reduced revenues from MVPD providers but would gain only five percent of New EchoStar’s increased profits. We conclude that this type of vertical foreclosure is therefore highly unlikely to be profitable in this case.

259. Alternatively, New EchoStar could act in an anticompetitive manner against other programming providers in order to benefit its five percent shareholder, Vivendi. For example, New EchoStar could provide Vivendi’s competitors with less desirable channel locations, or charge those programmers rates higher than it would if they did not compete with Vivendi. EchoStar, however, has a

⁶¹² See *Ownership Further Notice*, 16 FCC Rcd at 17335 (discussing Commission’s horizontal ownership limit, under review, that bars cable operators from owning systems that reach more than 30% of MVPD subscribers nationwide).

responsibility to the other 95% of its shareholders. It is therefore doubtful that New EchoStar would take actions that would decrease the profits of its other shareholders in order to increase Vivendi's.⁶¹³ Moreover, EchoStar has no incentive not to make its other channels available to Vivendi's closest competitors if EchoStar otherwise finds it profitable to do so. Vivendi is a part-owner of EchoStar; EchoStar is not a part-owner of Vivendi; thus, New EchoStar would receive no part of any additional profits Vivendi might make because of New EchoStar's discrimination against other programmers, and New EchoStar therefore has no incentive to favor Vivendi (apart from complying with the terms of its contract).⁶¹⁴ In short, other than providing it with five guaranteed channels, New EchoStar has no reason to discriminate in favor of Vivendi. We therefore do not find any problem in the area of vertical foreclosure.

2. Transfer of Control of PanAmSat

260. *Background.* Part of the Application before us involves the transfer of control of the licenses of PanAmSat from Hughes to New EchoStar. PanAmSat is a major provider of fixed satellite services ("FSS") in the United States and is currently 81% owned by Hughes. Most distribution of video programming to MVPD service providers (and to over-the-air television broadcasters) is carried over FSS. Upon consummation of the planned transaction, New EchoStar would both be a DBS provider and an FSS provider.

261. In delivering video services to consumers, MVPD operators typically retransmit programming received from distant points, rather than originate programming at the locale where transmission takes place. To obtain these signals, the MVPD operators rely primarily on FSS provided over a number of GSO satellites.⁶¹⁵ For national distribution of video programming within the United States, a full CONUS satellite "footprint" is needed.⁶¹⁶ Roughly 70% of the capacity on FSS satellites in the United States is dedicated to video distribution; only seven percent is unused.⁶¹⁷

262. Information from various sources indicates that there are three major FSS operators licensed by the United States, with about \$2 billion in revenues per year.⁶¹⁸ SES ASTRA and PanAmSat are the two dominant operators, with Loral Space a distant third. In addition, there are fringe providers, such as New Skies, Anik, and various Latin American satellites partly available for North American use. PanAmSat controls about 35% of FSS satellite transponder capacity and carries about the same amount of national video programming, as measured by transponder usage. SES ASTRA controls about 42% of FSS satellite transponder capacity and provides about the same amount of national video programming.

⁶¹³ We note that no competitor of Vivendi has filed comments making a vertical foreclosure argument, perhaps because, for the reasons expressed above, the possibility of vertical foreclosure seems remote.

⁶¹⁴ A different analysis might apply if Vivendi controlled of EchoStar or was a very significant shareholder, but that is not the case here.

⁶¹⁵ FSS is defined as satellite service between fixed, as opposed to mobile, points and excluding broadcast satellite service such as DBS. Non-geostationary FSS also exist, but because of cost and other considerations, video distribution is carried primarily by GSO satellites operating in the C- and Ku-Bands. In the rest of this issue paper, when we refer to FSS satellites, we mean GSO FSS satellites exclusively.

⁶¹⁶ This corresponds to orbital slots from about 61.5° W.L. to 155.5° W.L.

⁶¹⁷ See ING Barings' *Satellite Communications Industry*, March 2000, p. 149.

⁶¹⁸ See data filed with the Commission in July 2001, together with data from LyngSat.com and ING Barings' *Satellite Communications Industry*, March 2000. Worldwide FSS had \$7.2 billion in 2000, according to SSB with 5,235 transponders and 82 percent utilization, with North America having 1,504 of those transponders (29 percent) with 88 utilization.

One market observer describes the FSS market to have an “oligopoly-like market structure of highly profitable players in the longer term.”⁶¹⁹

263. The Applicants state that the acquisition of PanAmSat will provide significant benefits to consumers from the combination of FSS resources of DirecTV (Hughes) and EchoStar to bring broadband satellite services to market faster. The Applicants also state that the transaction will not create any significant overlap in the provision of FSS services that should raise any concern, given that EchoStar does not currently provide any telecommunications services of the same type as PanAmSat in the United States or elsewhere.

264. Duke Law argues that the merger would result in the largest MVPD provider, New EchoStar, having control over the most popular and heavily-used commercial satellite programming distribution network, PanAmSat.⁶²⁰ According to Duke Law, the acquisition of PanAmSat would allow New EchoStar to use its gatekeeper role in the commercial programming distribution market to obstruct the availability of public interest DBS programming.

265. *Discussion.* Although Hughes controls 35% of the FSS market through its ownership of the PanAmSat satellites, EchoStar does not operate any FSS satellites. Thus, post-merger, New EchoStar would have approximately 35% of the FSS market. With respect to the MVPD market, as of June 2002, DirecTV reported approximately 10.75 million subscribers,⁶²¹ approximately 11.5% of all MVPD subscribers,⁶²² and EchoStar reported approximately 7.5 million subscribers,⁶²³ or approximately 8% of all MVPD subscribers. Thus, Hughes currently controls approximately 35% of the FSS market and 11.5% of the MVPD market, and after the merger, New EchoStar would control approximately 35% of the FSS market⁶²⁴ and 19.5% of the MVPD market.

⁶¹⁹ See Merrill Lynch, *Eye in the Sky*, 1Q02 Preview, April 12, 2002. The Hirschman-Herfindahl Index (HHI) of market concentration resulting from the market shares in the FSS market is between approximately 2,989 and 3,518. The DOJ-FTC Merger Guidelines describes such a market as highly concentrated. Typically, the Merger Guidelines contemplate a two-year time horizon in assessing whether market concentration could lead to anti-competitive effects. Most of our understanding of the future of the FSS industry relies on forecasts by Wall Street market analysts. See, e.g., Merrill Lynch (April 12, 2002); Salomon Smith Barney, *Satellite Communications and Towers*, Jan. 3, 2002. They generally believe that supply and demand will be in balance for the foreseeable future. This forecast is, however, subject to considerable uncertainty. On the supply side, new digital compression technology is generating a quantum leap in the amount of programming that can be transmitted over a single transponder. Preparations are under way for development of Ka-Band satellite services that could result in a substantial expansion of FSS capacity. The first launches of Ka-Band satellites are, however, about three years away. On the demand side, market watchers anticipate that Internet broadband applications (e.g., streaming video) and the transition to HDTV, will eventually place great demands on FSS. The speed with which these nascent applications develop, however, is uncertain. As a result, there could be short-term shortages or gluts of FSS capacity. Such short-term imbalances are, however, typical in any market characterized by dynamic growth and technological innovation.

⁶²⁰ Duke Law Reply Comments at 27-28.

⁶²¹ *Hughes Second Quarter 2002 Results Driven By String DirecTV U.S. Financial Performance*, Hughes Elec. Corp. Press Release (July 15, 2002).

⁶²² There are approximately 94 million MVPD subscribers nationwide.

⁶²³ *EchoStar Reports Second Quarter 2002 Financial Results*, EchoStar Corp. Press Release (Aug. 15, 2002).

⁶²⁴ Although EchoStar does not currently operate any FSS satellites, it does have licenses for the deployment of three Ka-Band satellites. This, however, is a small percentage of the total Ka-Band licenses, many of which are held by PanAmSat and Hughes Communications Galaxy, as well as other companies. Thus even if Ka-Band development proceeds smoothly, merger of PanAmSat's and Hughes' assets with those of EchoStar would have little effect on the Ka-Band or FSS as a whole.

266. We find it unlikely that the transfer of PanAmSat to New EchoStar, if the transaction ultimately were to be approved, would create any harms in the FSS and MVPD markets. First, because EchoStar today does not own any FSS satellites, the transaction does not increase the concentration in the FSS market. Second, PanAmSat is already under common control with a DBS provider – DirecTV – and the proposed transaction would not change that situation. Duke Law has suggested no reason why New EchoStar’s ownership of PanAmSat, as compared to Hughes,’ would affect the availability of public interest DBS programming

267. The economic literature describes certain scenarios in which it would be profitable for an integrated firm to act strategically against downstream rivals that use the firm’s good or services.⁶²⁵ Thus, this literature suggests that New EchoStar might have an incentive to use its market power in the FSS market (assuming, arguendo, that it would have any) to competitively harm cable rivals, who use FSS. For instance, New EchoStar could degrade the quality of the FSS service provided to rivals, restrict supply, or raise price of FSS, all in an attempt to gain additional share (and earn additional profits) in the MVPD market.

268. Although possible, we find that such an attempt is unlikely to occur and even more unlikely to succeed. With 35% of the FSS market, it is doubtful that New EchoStar would have sufficient market power to carry out such a scheme. Further, there appears to be sufficient excess capacity in the FSS market at present so that if PanAmSat attempted to raise rates, it would likely lose customers to the other FSS providers. Thus, unilateral restriction of FSS supply would likely be very costly to New EchoStar and would achieve little. Moreover, as mentioned above, New EchoStar would have only a slightly stronger percentage of the MVPD market than Hughes does currently. Based on the similarity between New EchoStar’s post-merger market shares and Hughes’ current market shares in both the FSS market and the national MVPD market, there is little reason to believe, and no evidence in the record to suggest, that New EchoStar would have a significantly greater ability to act anticompetitively than Hughes does now in the FSS market. Moreover, it is hard to imagine that New EchoStar’s strengthened presence in the MVPD market would enable it to increase the price of FSS service, as Duke Law suggests. We therefore conclude that New EchoStar’s acquisition of PanAmSat would be unlikely to cause competitive harm in the FSS or MVPD markets. Accordingly, we are not designating for hearing any issues regarding the transfer of control of PanAmSat’s licenses to New EchoStar.⁶²⁶

B. Proposed Merger Conditions

269. Several merger Opponents and other commenters suggest that if the Commission were to approve the proposed merger, New EchoStar should be subject to one or more conditions. A number of parties propose conditions that they contend will increase competition. Cablevision, through its wholly-owned subsidiary, R/L DBS (“Rainbow DBS”), holds an authorization to provide DBS service over 11 DBS channels at the half-CONUS 61.5° W.L. orbital location, and plans to initiate DBS service by late August 2003. Cablevision proposes as a condition to merger approval that EchoStar be divested of 17

⁶²⁵ See, e.g., S. Salop and D. Scheffman, *Raising Rivals’ Costs*, 73 Am. Econ. Rev. 267 (1983); T. Krattenmaker and S. Salop, *Anticompetitive Exclusion: Raising Rivals’ Costs to Achieve Power over Price*, 96 Yale L. J. 209, 293 n.73 (1986) (citing articles).

⁶²⁶ As indicated *supra*, the Applicants have also stated that EchoStar has agreed to purchase Hughes’ interest in PanAmSat in the event the proposed transfer of Hughes and EchoStar to New EchoStar is terminated under certain circumstances. See Application at 2, and Application Vol. II at Tab 4. We cannot now predict either the outcome of the issues we designate for hearing or whether the circumstances described in the Applicants’ agreements will come to pass. As no standalone application for the transfer of control of PanAmSat to EchoStar is pending before us, we do not address the question whether such a transfer would be in the public interest pursuant to Section 310 at the present time.

transponders from the 61.5° W.L. to “a new DBS entrant” (itself) in order to provide effective competition to New EchoStar.⁶²⁷ Cablevision also requests that the Commission require EchoStar to lease capacity on its EchoStar-3 satellite to Cablevision for not less than three years.⁶²⁸ WSNet recommends that the Commission condition the merger on a requirement to provide WSNet, or some similarly situated entity, with permanent access to full-CONUS enhanced satellite facilities.⁶²⁹ Satellite Receivers proposes that the Commission should condition the merger upon the licensing of MVDDS providers, and require New EchoStar to enter into a consent decree agreeing to share the 12.2-12.5 GHz spectrum.⁶³⁰

270. SES Americom is seeking Commission authorization to initiate a new DBS service known as AMERICOM2Home.⁶³¹ It argues that, unless certain conditions are imposed, New EchoStar will have the market power and incentive to prevent the development of this new service.⁶³² SES Americom thus proposes that the approval of the merger be conditioned on the Commission requiring operator-to-operator discussions of interference concerns. It also requests that New EchoStar be required to provide open access to customer premises equipment, including the satellite dish and receiver to competing satellite service providers, and to make its local television transmissions available on a wholesale basis at reasonable rates for resale to competitors’ customers. SES Americom also requests that the Commission forbid anticompetitive arrangements between New EchoStar and its retail distributors and content providers. Northpoint also suggests that the Commission condition the approval of the merger on the creation and implementation of an open standard for DBS receivers that would allow DBS customers to access services from competing wireless MVPD providers using their DBS receivers.⁶³³

271. Several proposals for conditions concern the provision of local-into-local service. Consumers Union, APTS, Eagle, Family, and Paxson propose that the Commission condition merger approval with various requirements and timetables for the carriage of local broadcast television stations by New EchoStar.⁶³⁴ APTS also suggests that New EchoStar be required to display all local broadcast stations on its electronic program guide in a non-discriminatory manner within 30 days of the

⁶²⁷ See Cablevision Sept. 18 *ex parte*, Attachment, “Rainbow DBS, Opportunities to enhance DBS MVPD competition in connection with the EchoStar/DirecTV merger,” at 2.

⁶²⁸ See Cablevision July 11 *ex parte*.

⁶²⁹ WSNet Comments at 3. See also Letter from Jared Abbruzzese, Chairman WSNet, to Marlene Dortch, Secretary, FCC (May 28, 2002) at 2. WSNet proposed specific language to require that New EchoStar provide control and use of a minimum of 24 channels of high-powered capacity on one of its existing DBS satellites to an unaffiliated wholesale provider of DTH and digital programming services nationwide at cost to ensure that alternative multichannel video programming services are offered in smaller markets and rural areas.

⁶³⁰ Satellite Receivers Comments at 4. In this regard, Consumers Union requests request that the Commission begin now to license MVDDS providers. Consumers Union Comments at 21-22.

⁶³¹ See *SES AMERICOM Inc.*, SAT-PDR-20020425-00071, Aug. 23, 2002.

⁶³² See Letter from Phillip L. Spector, Attorney for SES Americom, Inc., to Marlene H. Dortch, Secretary, FCC (Sept. 27, 2002).

⁶³³ Northpoint Petition at 9-10. See also Consumers Union Comments at 24 (the Commission should impose open access requirements similar to those in the AOL-Time Warner consent decrees).

⁶³⁴ Consumers Union Comments at 14 (carriage of all stations where technically feasible); APTS Comments at 5, 7 (carriage of local stations in 110 DMAs within 120 days of consummation of the merger); Eagle Petition at 4 (carriage of all local stations in a non-discriminatory manner); Family Petition at 5 (carriage of all local stations); Letter from Richard Swift, Esq., counsel for RYF (April 15, 2002) (require local-into-local service in Puerto Rico); Paxson Petition at 19-20 (carriage of local stations in the top 75 DMAs within 90 of the consummation of the merger, in the top 150 DMAs within 180 days and in all DMAs within one year).

consummation of the merger.⁶³⁵ Family suggests that the Commission waive or modify Section 76.66(c)(1) to stop New EchoStar from denying carriage based on technicalities relating to the timing or content of carriage requests and that we open a new carriage request window.⁶³⁶ In addition, Paxson proposes that the Commission require New EchoStar to comply with all notice, carriage and election procedures set forth in SHVIA and to carry all local broadcast stations on a non-discriminatory manner, with respect to cost, receiving equipment, signal quality, digital and multicast signals, interactive capabilities, and program-related information.⁶³⁷

272. Consumers Union proposes that the Commission should (1) increase the set-aside requirements pursuant to Section 25(b) of the Cable Act from four percent to seven percent from DBS operators to off-set the loss of editorial diversity, (2) require that an entity other than the DBS operator select the programming for the set-aside channels, and (3) impose additional reporting and enforcement obligations.⁶³⁸ The Local and State Government Advisory Committee (“LSGAC”) proposes that New EchoStar make channel capacity available for PEG access and contribute PEG capital comparable to that contributed by cable operators. LSGAC and Paxson also recommend that the Commission impose specific enforcement mechanisms and penalties in case any of the conditions are not met.⁶³⁹

273. The State of Alaska proposes conditions relating to the provision of broadband service in Alaska to ensure that Alaska receives satellite Internet services within a reasonable time period and the next generation satellite broadband Internet services at the same time as they are offered in the contiguous United States.⁶⁴⁰ The State of Alaska, the Regulatory Commission of Alaska (“RCA”) and LSGAC suggest that New EchoStar be required to offer the same national pricing guarantees for broadband services as it proposes for DBS, and offer broadband equipment and installation prices in Alaska at prices equal to the prices offered to customers in the continental United States.⁶⁴¹ Similarly, Consumers Union suggest that the Commission obtain an enforceable guarantee that New EchoStar will offer non-discriminatory pricing, rates, terms, and conditions in rural areas that are comparable to those offered in competitive markets, including the same equipment subsidies, promotions and service options.⁶⁴²

274. In light of our decision to designate the Applications for hearing, we do not address the merits of any of these proposed conditions.

VII. BALANCING POTENTIAL PUBLIC INTEREST HARMS AND BENEFITS

275. The Applicants have failed to meet their burden of proof to show that, on balance, the proposed merger is in the public interest.⁶⁴³ In this case, the record indicates that substantial potential public interest harms may result from the transaction, which in turn creates the need for Applicants to

⁶³⁵ APTS Comments at 7.

⁶³⁶ Family Petition at 5.

⁶³⁷ Paxson Petition at 18-19.

⁶³⁸ Consumers Union Comments at 15.

⁶³⁹ Letter from Kenneth Fellman, Chairman, Local and State Government Advisory Commission (April 12, 2002) (“LSGAC Letter”) at 4.

⁶⁴⁰ State of Alaska Comments at 8-9.

⁶⁴¹ *Id.* at 9; RCA Comments at 6; LSGAC Letter at 4.

⁶⁴² Consumers Union Comments at 22-23. In the alternative, they suggest that the Commission consider a structural condition such as requiring New EchoStar to divest a certain amount of satellite capacity. *Id.* at 23.

⁶⁴³ See *Time Warner-AOL Order*, 16 FCC Rcd at 6547, *AT&T-MediaOne Order*, 15 FCC Rcd at 9816, *AT&T-TCI Order*, 14 FCC Rcd at 3160.

demonstrate that substantial and cognizable merger-specific public interest benefits will flow from the combination. The record before us irrefutably demonstrates that the proposed transaction would eliminate a current viable competitor from every market in the country, whether those markets are currently served by cable systems or are markets in which no cable systems exist, at best resulting in a merger to duopoly, and at worst a merger to monopoly. It would combine two DBS competitors who are currently fairly evenly balanced in terms of the assets necessary for effective competition in the MVPD market. Each has, over a number of years, at great expense, acquired the necessary spectrum licenses, developed and deployed the necessary equipment (satellites, earth stations, and consumer premises equipment), developed the necessary resources for marketing and consumer support, and acquired a substantial base of customers. Perhaps most significantly, each holds licenses for approximately half the total available orbital slots that allow broadcast to the entire continental United States – licenses they seek in this proceeding to transfer to a single new entity. Accordingly, the barrier to entry for any entity seeking to compete in the market for satellite provision of MVPD service would be enormous. Sufficient widespread entry into MVPD markets via terrestrial wireless and wireline platforms, at least within the next two years, is not substantially easier in any respect.

276. As noted above, case law under the antitrust laws is generally quite hostile to proposed mergers that would have these impacts on the competitive structure, because such mergers are likely to increase the incentive and ability to engage in anticompetitive conduct.⁶⁴⁴ Competitive impacts are an important aspect of the Commission's public interest standard, as is consistency with Communications Act policy and the Commission's rules. The landmark Telecommunications Act of 1996 set forth a "procompetitive, de-regulatory national policy framework" that opened "all telecommunications markets to competition" with the aim of accelerating "rapidly private sector deployment of advanced telecommunications and information technologies."⁶⁴⁵ Competition in the communications industries is the cornerstone of our modern communications policy because it is well recognized that competition, rather than regulation of monopoly providers, has the greatest potential to bring consumer welfare gains of lower prices and more innovative services. Accordingly, a proposed transaction's consistency with the Act, our rules and competition policy in general is an integral part of our public interest review.

277. This Commission has a long history of establishing spectrum-based commercial services with no fewer than two participants per service, with the aim of creating competitive markets for spectrum-based voice, video and data services. The Applicants have cited no example where we have permitted a single commercial spectrum licensee to hold the entire available spectrum allocated to a particular service.

278. With respect to MVPD services, our public interest standard also includes a consideration of the impact on program and viewpoint diversity, and the record indicates that elimination of an alternative MVPD provider in every market in the country is problematic with respect to at least one measure of diversity – viewpoint diversity.

279. The Applicants attempt to meet their burden by defining the only relevant competitive struggle as that between the dominant cable operators on the one hand and DBS service providers on the other. They assert that little competitive harm will result from the consolidation of the DBS industry, because the cable operators will provide a sufficient competitive check on DBS where cable is available, and a national DBS programming pricing commitment will extend this protection to areas not served by cable systems. They argue that competition in the MVPD marketplace will be more vigorous if their

⁶⁴⁴ See *Heinz*, supra; *Staples*, supra.

⁶⁴⁵ See Pub. L. No. 104-104, 110 Stat. 56 (1996), S. Conf. Rep. No. 104-230, at 1 (1996). The Telecommunications Act of 1996 Act amends the Communications Act of 1934.

assets are combined into a single entity that will be better equipped to compete with cable than either of existing stand-alone DBS providers today.

280. Our analysis of the potential competitive harms to the MVPD market indicates that the proposed merger would significantly increase concentration in an already concentrated market, and thus the merger should be presumed to create or enhance market power or facilitate its exercise. In addition, because competitive entry that could defeat any attempt by the merged entity to raise prices is unlikely to occur within the relevant timeframes for both committed and uncommitted entrants, there appears to be a substantial likelihood that the proposed merger will have significant adverse impact on competition in the MVPD market. Our analysis of the likelihood that competition may in fact be harmed either through unilateral actions by the merged entity or through coordinated interaction among firms in the relevant market indicates that the proposed merger could result in substantial consumer welfare losses, even assuming realization of all of the cost savings alleged by the Applicants. Such a loss of competition within the MVPD market is likely to harm consumers by eliminating a viable service provider in every market, creating the potential for higher prices and lower service quality, and negative impacts on future innovation.

281. Thus, the record before us indicates that the combination of EchoStar and DirecTV would eliminate the viable facilities-based intramodal competition that exists in a market with high barriers to entry. In its place of this viable competition, the Applicants offer a scheme of national pricing, to be administered by regulatory authorities. Our analysis, however, indicates that the Applicants' proposed national pricing plan is unlikely to be an adequate or effective remedy for the competitive harms likely to flow from the proposed merger. National pricing does not mean low pricing and the plan as proposed would leave Applicants free to price discriminate on a targeted basis, particularly with respect to promotions, installation and equipment offers and to discriminate with respect to service quality. The degree of regulatory oversight that would be needed to monitor such a plan to ensure against abuse would be substantial.

282. Thus, even if the national pricing plan were likely to be an effective competitive safeguard, its implementation would not be consistent with the Communications Act or with our overall policy goals. In essence, what Applicants propose is that we approve the replacement of viable facilities-based competition with regulation. This can hardly be said to be consistent with either the Communications Act or with contemporary regulatory policy and goals, all of which aim at replacing, wherever possible, the regulatory safeguards needed to ensure consumer welfare in communications markets served by a single provider, with free market competition, and particularly with *facilities-based* competition. Simply stated, the Applicants' proposed remedy is the antithesis of the 1996 Act's "pro-competitive, de-regulatory" policy direction. The merger would likely produce a more capable, but less effective, competitor to cable and would totally eliminate what appears to be a very healthy level of intramodal competition among the two facilities-based DBS providers.

283. The Applicants claim that the primary benefit from the combination would be in terms of the spectrum efficiencies gained by eliminating of the present duplicative carriage of identical national and local programming channels on each DBS system. The Applicants propose to "reclaim" the spectrum from this duplication over a period of several years and to use it to expand the combined entity's provision of carriage of to all local broadcast television stations in all 210 DMAs. They also claim that they will provide additional new services such as niche programming, HDTV, VOD and other forms of interactive television. Although recent statistics on new subscribers indicate that both Applicants continue to add subscribers at a far more rapid rate than the cable systems, Applicants predict that this additional spectrum will become increasingly critical to their ability to compete with cable as cable operators upgrade their systems and add advanced products that will counter the advantages that DBS has historically had in terms of product offerings and technical quality. The other primary alleged benefit derives from combining the subscribers of the two DBS systems into a single unit to take

advantage of economies of scale and bargaining power with suppliers, particularly programming providers.

284. As we have stated in the foregoing sections, upon careful examination, the bulk of the Applicant's promised benefits with respect to MVPD services appear to be either inadequately supported by the data supplied; not merger-specific; achievable through means other than monopoly control over all available full-CONUS DBS spectrum; or are otherwise not cognizable under our public interest standard. Moreover, the Applicants have not demonstrated that their proposed merger is *necessary* to achieve many, if not all, of their claimed public interest benefits – they merely allege that it will provide them the means with which to provide these benefits. Our central concern, however, is that with the resulting high degree of concentration in all MVPD markets, the Applicants' incentives to carry through on their promises of enhanced competition will be decreased, rather than increased. Thus, although we fully recognize the value of having free over-the-air broadcasting service in all 210 DMAs, we do not believe that the merger is more likely to bring satellite delivery of such service than the status quo. If the provision of local-into-local service is as important to the Applicants' competitive ability as they claim, then we fully believe that market forces will impel them to each find a way to bring that service to as many markets as possible. Accordingly, based on the record before us, we cannot give very much weight to Applicants' claimed MVPD benefits.

285. Insofar as the broadband market is concerned, encouraging the development and provision of broadband service over competing platforms is an objective of the Communications Act and has been given special priority by the Commission.⁶⁴⁶ The Applicants' promises of a future Ka-band broadband satellite product that is competitive on both service quality and price with cable and DSL products would be a significant advance, if these promises were to be realized. The potential harms, however, are equally significant. Allowing combination of the assets of the two companies with the strongest incentive and ability to compete in offering satellite broadband services would offend the Communication Act's strong overall preference for competition unless it were demonstrated convincingly that another significant objective could not be achieved except through such a combination.

286. Moreover, the Applicants' claimed benefit here is weaker than in the MVPD market, since each broadband customer uses up additional spectrum, regardless of the number of providers. Instead, the Applicants rely on an economies of scale argument – that the merger is necessary to provide the minimum number of potential customers that will justify the investment necessary to create a competitive product. Parties have raised substantial issues with respect to both the need for the merger to create the necessary scale and the harm to competition that will result from combining the spectrum, customers, equipment, and support services of the two strongest existing potential entrants.

287. On balance, we cannot find that the Applicants have made a sufficient showing at this point either that the harms from the proposed transaction will be insubstantial or that the alleged benefits will outweigh them. Despite our efforts to obtain additional information and data from the Applicants in support of their claims, serious questions remain as to whether the proposed transaction would do significant and irreversible damage to competition in several markets without sufficient offsetting and cognizable public interest benefits. Consequently, it appears that the Applicants will be able to justify the proposed transaction, if at all, only after the more comprehensive fact-finding capabilities available in an administrative hearing.

288. The framework for analysis contained in this Order should ensure an expedited hearing. We identify below the principal factual issues that must be resolved with respect to both the harms the merger may produce and the benefits that may flow from it.

⁶⁴⁶ See §706, Pub. L. 104-104, Title VII, Feb. 8, 1996, 110 Stat. 153, reproduced in the notes under 47 U.S.C. §157.

VIII. ISSUES TO BE DETERMINED AT HEARING

289. For the reasons stated above, we are unable to find that the public interest, convenience and necessity would be served by approving the transfer of control to New EchoStar of the licenses and authorizations controlled by GM/Hughes and DirecTV and EchoStar. We have concluded, based on the evidence before us that Applicants have failed to demonstrate that the proposed transaction would not cause anticompetitive and other harms, and have failed to demonstrate that the potential public interest benefits resulting from the transaction would outweigh those harms. Accordingly, pursuant to Sections 309(e) and 409(a) of the Act, and taking into consideration the conclusions set forth in this Order, we designate the above-captioned Applications for an evidentiary hearing before an Administrative Law Judge (“ALJ”), and we direct the ALJ to prepare an Initial Decision on the issues set forth below. These issues have been designated for hearing because they reflect findings and conclusions that have been made based on the record we have compiled thus far, which prevent us from making a determination that the grant of the Applications will serve the public interest, convenience and necessity.

Issue 1: Whether the proposed transaction is likely to cause anticompetitive harm. In reaching a determination on this issue, as outlined above, the following should be considered:

- (a) the product market (*e.g.*, whether the relevant product market is MVPD service, DBS service, or some other subset of MVPD service) (*see* paras. 106 -116);
- (b) the geographic market (*e.g.*, whether the proper geographic market is local, and whether, for purposes of analysis, the relevant geographic markets should be aggregated into three categories – markets not served by any cable system; markets served by low-capacity cable systems; markets served by high-capacity cable systems; and the relative number of households in each of these categories) and the number of subscribers per market (*see* paras. 117 - 125);
- (c) the market participants, market shares and concentration (*see* paras. 126 - 139);
- (d) the timeliness, likelihood, and sufficiency of entry to offset any potential adverse competitive effects that may result from the proposed transaction (*see* paras. 140 - 150);
- (e) the effects of the proposed transaction on price, quality and innovation (considering the likelihood of coordinated behavior among competing firms and the ability of the Applicants to unilaterally take anticompetitive actions) (*see* paras. 151 - 177);
- (f) the efficacy, potential harms, and potential benefits of Applicants’ proposed national pricing plan (*see* paras. 178 - 187);
- (g) the proposed transaction’s effect on the ability of multichannel video programmers to reach certain niche audiences (*see* paras. 248 - 256); and
- (h) any conditions proposed by the Applicants.

Issue 2: Whether the proposed transaction is likely to cause other public interest harms. In reaching a determination on this issue, the following should be considered:

- (a) the proposed transaction’s effect on viewpoint diversity (*see* paras.42-43, 49-51 and 55); and
- (b) the proposed transaction’s effect on the Commission’s spectrum policies (*see* paras. 83 - 96).

Issue 3: Whether the proposed transaction is likely to yield any public interest benefits. In reaching a determination on this issue, as outlined above, the following should be considered:

(a) whether the cost savings and other benefits claimed by Applicants are non-speculative, credible and transaction-specific and are likely to flow through to the public (*see paras. 188 - 217*); and

(b) whether the proposed transaction's impact on the provision of Internet access service via satellite is likely to be beneficial or harmful. (*see paras. 218 - 247*).

Issue 4: On balance, whether the public interest, convenience and necessity would be served by the grant of the above-captioned application and the joint application submitted by EchoStar and Hughes requesting authority to launch and operate NEW ECHOSTAR 1, a direct broadcast satellite that would be located at the 110° W.L. orbital location.

IX. ORDERING CLAUSES

290. Accordingly, IT IS ORDERED, That, pursuant to Section 309(e) of the Communications Act, the application for consent to transfer control of various Commission authorizations, including DBS and fixed satellite space station authorizations, earth station authorizations, and other related authorizations (as set forth in Appendices B, C and D) held by wholly- or majority-owned subsidiaries of EchoStar Communications Corporation (a Nevada corporation), General Motors Corporation, and Hughes Electronics Corporation to EchoStar Communications Corporation (a Delaware corporation); and the joint application submitted by EchoStar and Hughes requesting authority to launch and operate NEW ECHOSTAR 1, a direct broadcast satellite that would be located at the 110° W.L. orbital location (File No. SAT-LOA-20020225-00023) ARE DESIGNATED FOR HEARING. The Hearing shall be at a time and place and in front of an ALJ to be specified in a subsequent Order, on the issues set forth in paragraph 289.

291. IT IS FURTHER ORDERED, That pursuant to Section 309(e) of the Communications Act, the burden of proof with respect to the introduction of evidence and the burden of proof with respect to the issues specified in this Order shall be upon GM, Hughes, and EchoStar, the applicant parties in this proceeding.

292. IT IS FURTHER ORDERED, That the Commission's Consumer and Government Affairs Bureau, Reference Information Center, SHALL SEND copies of this Order to all parties by certified mail, return receipt requested.

293. IT IS FURTHER ORDERED, That the Chief, Enforcement Bureau, shall be a party to the designated hearing.

294. IT IS FURTHER ORDERED, That a copy of each document filed in this proceeding subsequent to the date of adoption of this Order SHALL BE SERVED on the counsel of record appearing on behalf of the Chief, Enforcement Bureau. Parties may inquire as to the identity of such counsel by calling the Investigations and Hearings Division of the Enforcement Bureau at (202) 418-1420. Such service SHALL BE ADDRESSED to the named counsel of record, Investigations and Hearings Division, Enforcement Bureau, Federal Communications Commission, 445 12th Street, S.W., Room 3-B431, Washington, D.C. 20554.

295. IT IS FURTHER ORDERED, That within 30 days of the mailing of this Order pursuant to Paragraph 292 above, the parties may file an amended application with the Commission to ameliorate the competition concerns identified in this Order and may also file a petition to suspend the hearing pending review of the amended application.

296. IT IS FURTHER ORDERED, That, to avail themselves of the opportunity to be heard, GM, Hughes, and EchoStar, pursuant to Sections 1.221(c) and 1.221(e) of the Commission's Rules, in person or by their respective attorneys, SHALL FILE in triplicate, A WRITTEN APPEARANCE, stating an intention to appear on the date fixed for the hearing and present evidence on the issues specified in this Order. Such written appearance shall be filed within 20 days of the mailing of this Order pursuant to Paragraph 292 above. Pursuant to Section 1.221(c) of the Commission's rules, if the parties fail to file an appearance within the specified time period, the assignment application will be dismissed with prejudice for failure to prosecute.

297. IT IS FURTHER ORDERED, That National Rural Telecommunications Cooperative; American Cable Association; Northpoint Technology, Ltd.; National Association of Broadcasters; Pegasus Communications Corp.; The Word Network; Johnson Broadcasting, Inc. and Johnson Broadcasting of Dallas, Inc.; Family Stations, Inc. and North Pacific International Television, Inc.; Communication Workers of America; Paxson Communications Corp.; Carolina Christian Television, Inc. and LeSea Broadcasting Corporation; Univision Communications, Inc.; Eagle III Broadcasting, LLC; and Brunson Communications, Inc., are made parties to the proceeding pursuant to Section 1.221(d) of the Commission's rules. To avail themselves of the opportunity to be heard, pursuant to Sections 1.221(e) of the Commission's rules, each of these parties, in person or by its attorneys, SHALL FILE in triplicate, A WRITTEN APPEARANCE, stating its intention to appear on the date fixed for the hearing and present evidence on the issues specified in this Order. Such written appearance shall be filed within 20 days of this Order becoming effective pursuant to Paragraph 292 above. Such written appearance must also be accompanied by the fee specified in Section 1.1107 of the Commission's Rules or be accompanied by a deferral request pursuant to Section 1.1117 of the Commission's Rules. If any of these parties fails to file an appearance within the time specified, it shall, unless good cause for such failure is shown, forfeit its hearing rights.

298. IT IS FURTHER ORDERED, That, pursuant to Section 1.223 of the Commission's Rules, any person seeking to participate as a party in the hearing may file a petition to intervene. Such petition shall be filed within 30 days of the full text or a summary of this Order being published in the Federal Register. Such petition to intervene must either establish, under oath, that a person is a party in interest, in which case the petition shall be granted; or such petition must set forth the interest of petitioner in the proceedings, show how such petitioner's participation will assist the Commission in the determination of the issues in question, set forth any proposed issues in addition to those already designated for hearing, and be accompanied by the affidavit of a person with knowledge as to the facts set forth in the petition, in which case the ALJ may grant or deny the petition to intervene, and may limit intervention to a particular stage or stages of the proceeding, in his or her discretion. Pursuant to Section 1.225 of the Commission's Rules, no person shall be precluded from providing any relevant, material and competent testimony at the hearing because he or she lacks sufficient interest to justify intervention as a party.

299. IT IS FURTHER ORDERED, That the application for transfer of control of the licenses and authorizations at issue in this proceeding WILL BE HELD IN ABEYANCE PENDING THE OUTCOME OF THIS PROCEEDING.

FEDERAL COMMUNICATIONS COMMISSION

Marlene H. Dortch
Secretary

APPENDIX A

PETITIONS TO DENY AND COMMENTS**I. Submissions in Response to the December 21, 2001, Public Notice****A. Petitions to Deny filed February 4, 2002**

American Cable Association (“ACA”)
Brunson Communications Inc. (“Brunson”)
Carolina Christian Television Inc. and LeSea Broadcasting Corporation (“Carolina”)
Communications Workers of America (CWA”)
Eagle III Broadcasting, LLC (“Eagle”)
Family Stations, Inc. Family Stations of New Jersey, Inc. and North Pacific International Television, Inc. (“Family”)
Johnson Broadcasting, Inc. and Johnson Broadcasting of Dallas, Inc. “Johnson”
National Association of Broadcasters (“NAB”)
National Rural Telecommunications Cooperative (“NRTC”)
Northpoint Technologies, Ltd. (“Northpoint”)
Paxson Communications Corporation (“Paxson”)
Pegasus Communications Corporation (“Pegasus”)
Univision Communications Inc. (“Univision”)
The Word Network (“Word”)

B. Comments filed February 4, 2002

ACC Satellite TV (“ACC”)
Aiken Electric Satellite TV Inc. (“Aiken”)
The American Antitrust Institute (“AAI”)
Association of Public Television Stations and the Public Broadcasting Service (“APTS”)
Circuit City Stores, Inc. (“Circuit City”)
Competitive Enterprise Institute (“CEI”)
Consumers Union, The Consumer Federation of America, and the Media Access Project (“Consumers Union”)
Intelsat Global Service Corporation (“Intersat”)
National Consumers League, the National Farmers Union and the National Grange (“National Consumers League”)
National Rural Electric Cooperative Association (“NRECA”)
Pappas Telecasting Companies (“Pappas”)
PrimeTime 24 Joint Venture (“PrimeTime 24”)
Progress and Freedom Foundation (“PFF”)
Public Communicators, Inc. (“Public Communicators”)
Regulatory Commission of Alaska (“Alaska Regulators”)
Satellite Receivers, Ltd. (“Satellite Receivers”)
State of Alaska (“Alaska”)
Third Millennium Communications & Electronics Co., LLC (“Third Millennium”)
United States Internet Industry Association (“USIIA”)
Vivendi Universal, S.A. (“Vivendi”)
World Satellite Network, Inc. (“WSNet”)
Writers Guild of America, Inc. (“WGA”)

C. Opposition filed February 25, 2002

EchoStar Communications Corporation, General Motors Corporation and Hughes Electronics Corporation (“Applicants”)

D. Reply Comments filed February 25, 2002

American Cable Association (“ACA”)
Law and Communications Policy Seminar at Duke Law School (“Duke Law”)
National Consumers League, The National Grange of the Order of Patrons of Husbandry and Organizations Concerned with Rural Education (“National Consumers League”)
The National Farm Union (“NFU”)
The National Grange of the Order of Patrons of Husbandry (“National Grange”)
North Pacific International Television, Inc. (“NPIT”)
National Rural Telecommunication Cooperative (“NRTC”)
National Rural Utilities Cooperative Finance Corporation (“CFC”)
Paxson Communications Corporation (“Paxson”)
RFD Communications, Inc. (“RFD-TV”)
Satellite Receivers, Ltd (“Satellite Receivers”)
US Action (“US Action”)

II. Submissions in Response to the April 19, 2002, Public Notice**A. Petition to Deny and Motion to Dismiss filed May 20, 2002**

National Council of La Raza (“NCLR”)

B. Petition to Dismiss filed May 20, 2002

National Rural Telecommunications Cooperative (“NRTC”)

C. Comments filed May 20, 2002

SES Americom, Inc. (“SES”)

D. Opposition and Reply Comments filed May 30, 2002

EchoStar Satellite Corporation and Hughes Electronics Corporation (“Applicants”)

E. Reply Comments filed May 30, 2002

National Association of Broadcasters (“NAB”)

F. Responses filed June 4, 2002

National Council of La Raza (“NCLC”)
SES Americom, Inc. (“SES”)

Appendix B
ECHOSTAR COMMUNICATIONS CORPORATION
Licenses and Authorizations Subject to Transfer

I. DBS Space Station Authorizations*EchoStar Satellite Corporation (Licensee)*

<u>Orbital Location</u>	<u>FCC Id.</u>	<u>Satellites In Use</u>	<u>Authorized Spectrum**</u>
119° W.L.	DBS 88-01 DBS 88-02	EchoStar 7, EchoStar 6, EchoStar 4	567 MHz (21 frequencies)
110° W.L.	S2232	EchoStar 5	783 MHz (29 frequencies)
61.5° W.L.	DBS 88-08	EchoStar 3	297 MHz (11 frequencies)
148° W.L.	S2231	EchoStar 1, EchoStar 2	648 MHz (24 frequencies)

II. Ku-Band Space Station Authorizations*EchoStar Satellite Corporation (Licensee)*

<u>Orbital Location</u>	<u>FCC Id.</u>	<u>Authorized Spectrum*</u>
83° W.L.	S2142	1000 MHz
121° W.L.	S2143	1000 MHz

III. Ka-Band Space Station Authorizations*EchoStar VisionStar Corporation (Licensee)*

<u>Orbital Location</u>	<u>FCC Id.</u>	<u>Authorized Spectrum*</u>
113° W.L.	S2210	2000 MHz

IV. Earth Station Authorizations (Listed by Call Sign and Type)*EchoStar Satellite Corporation (Licensee)*

E890631	Temp T/R	E980178	T/R
E950252	T/R	E980180	T/R
E950253	T/R	E990138	T/R
E950287	T/R	E990139	T/R
E950288	T/R	E990309	T/R
E970394	T/R	E990310	T/R
E980005	T/R	E980117	T/R
E980047	T/R	E010240	T/R
E980081	T/R	E010241	T/R
E980082	T/R	E010242	T/R
E980118	T/R	E970395	T/R
E980127	T/R	E970396	R
E980128	T/R	E101240	T/R
E980142	T/R	E010241	T/R
E980143	T/R	E010242	T/R
E980174	T/R	E010266	T/R
		E020233	T/R

Kelly Broadcasting Systems, Inc.

E860008	T/R
E920003	T/R
E920242	T/R
E950308	T/R
E980109	T/R
E980147	T/R
E000165	T/R
E950177	T
E980095	T
E980096	T
E980097	T

* Authorized Spectrum assumes 2 times frequency re-use.

** DBS authorized spectrum is based on 27 MHz channel bandwidth, guard band not included.

Appendix C
HUGHES ELECTRONICS CORPORATION
Licenses and Authorizations Subject to Transfer

I. DBS Space Station Authorizations*DirectTV Enterprises, LLC and USSB II, Inc. (Licensees)*

<u>Orbital Location</u>	<u>FCC Id.</u>	<u>Satellites In Use</u>	<u>Authorized Spectrum**</u>	
101° W.L.	DBS 8402	DIRECTV 2, DIRECTV 3, DIRECTV 1R, DIRECTV 4S	864 MHz	(32 frequencies)
	DBS 8402			
	S2369, S2430			
	DBS 81-07			
110° W.L.	DBS 8402	DIRECTV 1	81 MHz	(3 frequencies)
	DBS 81-07			
119° W.L.	DBS 8804	DIRECTV 5, DIRECTV 6	297 MHz	(11 frequencies)
	S2417			

II. Ku-Band Space Station Authorizations*Hughes Global Services, Inc. (Licensee)*

<u>Orbital Location</u>	<u>FCC Id.</u>	<u>Authorized Spectrum*</u>
77° W.L. (STA)	KS39 (SBS-4)	1000 MHz

III. Ka-Band Space Station Authorizations*Hughes Network Systems, Inc. (Licensee)*

<u>Orbital Location</u>	<u>FCC Id.</u>	<u>Authorized Spectrum*</u>	<u>Orbital Location</u>	<u>FCC Id.</u>	<u>Authorized Spectrum*</u>	<u>Orbital Location</u>	<u>FCC Id.</u>	<u>Authorized Spectrum*</u>
101° W.L.	S2132	2000 MHz	101° E.L.	S2187	2000 MHz	131° W.L.	S2338	2000 MHz
99° W.L.	S2133	2000 MHz	111° E.L.	S2188	2000 MHz	30° E.L.	S2339	2000 MHz
49° W.L.	S2185	2000 MHz	164° E.L.	S2189	2000 MHz	7.5° W.L.	S2340	2000 MHz
54° E.L.	S2186	2000 MHz	25° E.L.	S2190	2000 MHz	103° E.L.	S2341	2000 MHz

IV. Earth Station Authorizations (Listed by Licensee, Call Sign and Type)

<i>DirectTV Enterprises, LLC</i>		<i>Hot Telecom, Ltd.</i>		<i>Hughes Network Systems, Inc.</i>			
E950423	R	E000362	T/R	E880970	T/R	E881112	VSAT
E950424	R	E010187	T/R	E881109	T/R	E890426	VSAT
E980170	R	E020205	T/R	E890425	T/R	E890427	VSAT
E980341	R	E020206	T/R	E890627	T/R	E890428	VSAT
E930229	T	E020207	T/R	E900013	T/R	E890628	VSAT
E930304	T	E020208	T/R	E910612	T/R	E890629	VSAT
E930191	T/R	<i>USSB II, Inc.</i>		E920556	T/R	E890630	VSAT
E980285	T/R	E930437	R	E940460	T/R	E891001	VSAT
E980338	T/R	E930485	T/R	E940478	T/R	E891002	VSAT
E980340	T/R	<i>Hughes Global Services, Inc.</i>		E861092	Temp T/R	E900192	VSAT
E980473	T/R	E990024	T/R	E873438	Temp T/R	E900682	VSAT
E990159	T/R	E990055	Temp T/R	E000166	VSAT	E940455	VSAT
E950349	T/R	<i>Hughes Communications</i>		E880787	VSAT	E950471	VSAT
E010129	T/R	<i>Satellite Services, Inc.</i>		E880788	VSAT	E950472	VSAT
E010130	T/R	E960001	R	E880789	VSAT	E950473	VSAT
E990545	Temp T/R	E970079	R	E881110	VSAT	E990170	VSAT
<i>DirectTV Latin America, LLC</i>		E970094	R	E881111	VSAT	E970067	VSAT
E99023	T/R	E900013	T/R			E000166	VSAT

V. Wireless Licenses (Listed by Licensee, Call Sign and Type)

<i>Hughes Electronics Corp.</i>						<i>Hughes Communications Satellite Services, Inc.</i>		
<u>Call Sign</u>	<u>Type</u>	<u>Call Sign</u>	<u>Type</u>	<u>Call Sign</u>	<u>Type</u>	<u>Call Sign</u>	<u>Type</u>	
21AM	AC	KE4524	IG	WNIU649	IG	WPKJ833	IG	
21AX	AC	KXU919	IG	WNEP883	MG	<i>Hughes Network Systems, Inc.</i>		
KE2356	IG	WNIR536	IG	WNEU909	MG	WB2X1X	STA (EX)	
						WPLT306	IG	

* Authorized Spectrum assumes 2 times frequency re-use.

** DBS authorized spectrum is based on 27 MHz channel bandwidth, guard band not included.

Appendix D
PANAMSAT COMMUNICATIONS CORPORATION
 (Subsidiary of Hughes Electronics Corporation)
 Licenses and Authorizations Subject to Transfer

I. C and Ku-Band Space Station Authorizations*PanAmSat Licensee Corporation (Licensee)*

<u>Orbital Location</u>	<u>Band</u>	<u>Authorized Spectrum*</u>	<u>Orbital Location</u>	<u>Band</u>	<u>Authorized Spectrum*</u>
133° W.L.	C	1000 MHz	58° W.L.	C/Ku	2000 MHz
127° W.L.	C	1000 MHz	45° W.L.	C/Ku	2500 MHz
125° W.L.	C	1000 MHz	43° W.L.	C/Ku	3000 MHz
123° W.L.	C/Ku	2000 MHz	43° W.L.	Ku	
99° W.L.	C/Ku	2000 MHz	68.5°E.L.	C/Ku	3600 MHz
95° W.L.	C/Ku	2500 MHz	68.5°E.L. (STAs)		
91° W.L.	C/Ku	2000 MHz	72° E.L.	C/Ku	1500 MHz
74° W.L.	C/Ku	2000 MHz	166° E.L.	C/Ku	2000 MHz
			169° E.L.	C/Ku	2000 MHz

II. Ka-Band Space Station Authorizations*PanAmSat Corp. (Licensee)*

<u>Orbital Location</u>	<u>FCC Id.</u>	<u>Authorized Spectrum*</u>	<u>Orbital Location</u>	<u>FCC Id.</u>	<u>Authorized Spectrum*</u>
103° W.L.	S2191	2000 MHz	133° W.L.	S2223	2000 MHz
124.5° E.L.	S2427	2000 MHz	166° E.L.	S2224	2000 MHz
149° E.L.	S2428	2000 MHz	45° W.L.	S2221	2000 MHz
173° E.L.	S2429	2000 MHz	58° W.L.	S2220	2000 MHz
36° E.L.	S2192	2000 MHz	68.5° E.L.	S2225	2000 MHz
40° E.L.	S2425	2000 MHz	72.7° E.L.	S2226	2000 MHz
48° E.L.	S2426	2000 MHz			

IV. Earth Station Authorizations - (Listed by Licensee, Call Sign and Type)*PanAmSat Licensee Corp (Licensee)*

E950067	T	E980460	T/R	E970080	R	E980501	T/R
E000048	T/R	E980467	T/R	E970051	T	E980503	T/R
E000049	T/R	E980502	T/R	E000063	T/R	E990091	T/R
E000274	T/R	E990092	T/R	E000363	T/R	E990323	T/R
E000364	T/R	E990093	T/R	E010113	T/R	E990334	T/R
E000488	T/R	E990214	T/R	E010131	T/R	E990364	T/R
E010019	T/R	E990223	T/R	E010133	T/R	E990365	T/R
E010112	T/R	E990224	T/R	E4132	T/R	E2178	T/R
E7465	T/R	E990363	T/R	E900089	T/R	E3943	T/R
E881286	T/R	E990433	T/R	E920340	T/R	E860175	T/R
E890530	T/R	KA244	T/R	E920377	T/R	E881304	T/R
E940333	T/R	KA245	T/R	E930088	T/R	E900621	T/R
E940532	T/R	KA391	T/R	E940368	T/R	E900757	T/R
E950267	T/R	KA450	T/R	E950502	T/R	KL92	T/R
E950307	T/R	E950267	T/R	E950508	T/R		
E970352	T/R	E010118	Temp T/R	PanAmSat Comm. Services, Inc.			
E970391	T/R	E010280	T/R	E5702	T/R		
E970392	T/R	KA71	T/R				

V. Section 214 Authorizations*PanAmSat Carrier Services, Inc. (Licensee)*

Section 214	ITC-214-19980102-00004/ ITC-98-052
	FCN-NEW-20000515-00033
Section 214	ITC-93-236

PanAmSat Comm. Carrier Services, Inc.

Section 214	ITC-85-221
Section 214	ITC-85-069

* Authorized Spectrum assumes 2 times frequency re-use

APPENDIX E

MERGER SIMULATIONS OF THE ECHOSTAR-DIRECTV MERGER

A. The Role of Merger Simulation in Estimating Unilateral Effects

1. In recent years, the evaluation of mergers in differentiated product industries has focused increasingly on possible unilateral effects.⁶⁴⁷ At the same time, a technique known as “merger simulation” has emerged as a frequently used tool for assessing the magnitude of possible unilateral affects in differentiated products mergers.⁶⁴⁸

2. Merger simulations can take on varying degrees of complexity. All simulations need knowledge or assumptions about demand, marginal costs, prices, and firm behavior in the relevant product and geographic markets. With information on the current values of these variables and assumptions about any merger-related changes that may occur, the simulation will predict the change in consumer welfare likely to result from the merger.

3. A thorough understanding of demand for the merging products and their substitutes is required for a realistic merger simulation. An understanding of how consumers respond to changes in the prices of products in the relevant markets is of prime importance. This information is conveyed by the price elasticities of demand. At a minimum, the simulation requires values for the own-price elasticities of demand for the merging products.⁶⁴⁹ A richer model can be used if cross-price elasticities of demand are available as well.⁶⁵⁰ Price elasticities for the products in the relevant markets can either be assumed or estimated using econometric techniques. They can also be inferred if reliable information on prices and marginal costs are available, as well as tractable assumptions about firm behavior.

4. Merger simulations also require knowledge of the marginal costs of production before and after the merger. These costs can be obtained in a number of ways. They can be estimated using econometric techniques or accounting data. In merger simulations, the pre-merger marginal costs are commonly inferred using the values of the price elasticities, prices, and assumptions about firm behavior. Information on cost reductions likely to result from the merger can be developed from engineering and business case analyses. Alternatively, simple assumptions about cost reductions can be made.

5. Finally, assumptions must be made about the nature of competition between the firms. One of two forms of competition is generally assumed. These forms are “Bertrand” competition and “Cournot” competition, named after the 19th Century French economists who developed the theory.

⁶⁴⁷ See, e.g., Carl Shapiro, *Mergers with Differentiated Products*, 10 – SPG ANTITRUST 23 (1996) (“It is fair to say that economic analysis of differentiated-products mergers at the Division typically focuses on unilateral effects, unless there are structural factors facilitating collusion following the merger or there is a history of collusion in the industry.”); Jerry A. Hausman & Gregory K. Leonard, *Economic Analysis of Differentiated Products Mergers Using Real World Data*, 5 GEO. MASON L. REV. 321 (1997) (“Economic analyses of the competitive effects of mergers in differentiated product industries typically concentrate on the potential for so-called unilateral effects.”).

⁶⁴⁸ See, e.g., Gregory J. Werden, *Simulating the Effects of Differentiated Products Mergers: A Practical Alternative to Structural Merger Policy*, 5 GEO. MASON L. REV. 363, 377-81 (1997); Jith Jayaratne and Carl Shapiro, *Simulating Partial Asset Divestitures to ‘Fix’ Mergers*, 7 INTERNATIONAL JOURNAL OF THE ECONOMICS OF BUSINESS 179-200 (2000).

⁶⁴⁹ The own-price elasticity of demand for a product is defined as the percentage change in the demand for the product in response to a percentage change in its price.

⁶⁵⁰ The cross-price elasticity of demand for a product *i* is defined as the percentage change in the demand for that product in response to a percentage change in price of product *j*.

Under Cournot competition, a firm chooses to produce the amount of output that maximizes its profits. Equilibrium is reached when the level of each firm's output is such that it could not earn higher profits by changing its output decision when taking its competitors' output decisions as fixed.⁶⁵¹ Under Bertrand competition, firms compete by setting prices that maximize the firms' individual profits. Equilibrium under Bertrand competition is reached when no firm could earn higher profits by changing its prices when it takes its competitors prices as fixed.⁶⁵²

6. Once these four pieces of information have been obtained, they can be applied to the simulation to predict the prices that would result from the merger. The pre- and post-merger prices, along with the information about demand, are then used to determine the change in consumer welfare due to the merger.⁶⁵³

B. MacAvoy's and Sidak's Merger Simulation

7. Dr. MacAvoy and Mr. Sidak, on behalf of NRTC and NAB respectively, provide merger-simulation analyses in support of their argument that the merger will result in unilateral effects that will harm consumers through increased prices. Following standard practice, their respective calculations of the predicted loss in consumer surplus are accomplished in three broad steps: (1) estimating (or assuming) demand elasticities; (2) determining pre- and post-merger marginal cost; and (3) predicting post-merger prices based assumptions about firm behavior and market structure.

8. Dr. MacAvoy uses merger simulation to develop an estimate of the loss in consumer welfare that the merger is likely to cause in relevant geographic markets not served by cable. Using linear regression analysis, Dr. MacAvoy first estimates an elasticity of demand for DBS of -1.55.⁶⁵⁴ Then, using average cost per unit as a proxy for marginal cost and assuming that in areas not served by cable the merged entity will price as a monopolist, Dr. MacAvoy predicts a post-merger price of \$75.75 in those markets not served by cable.⁶⁵⁵ Based on these estimates of pre- and post-merger prices for DBS, Dr. MacAvoy derives a projected loss in consumer surplus of between \$120 million and \$700 million per year for areas not served by cable.⁶⁵⁶

9. Mr. Sidak, in contrast, estimates welfare losses not only for areas not served by cable, but also for areas that have access to cable. Mr. Sidak does not attempt to use econometric analysis to estimate the relevant demand elasticities, however, but rather simply assumes elasticities, which, he claims, are reasonable. For areas *not* served by cable, Mr. Sidak uses an estimate of the pre-merger price of DBS based on average revenue per customer⁶⁵⁷ and an assumed own-price elasticity of demand for

⁶⁵¹ Sometimes the equilibrium is referred to as a "*Cournot-Nash Equilibrium*," after John Nash, the American mathematician and economist who generalized both Cournot and Bertrand's models. See Jean Tirole, *The Theory of Industrial Organization*. Cambridge: The MIT Press, 1988 at 218-23.

⁶⁵² *Id.* at 209-12.

⁶⁵³ Consumer surplus or welfare is the difference between the total value that consumers derive from consuming a product, which is the areas under the demand curve, and the amount they pay for the product, which is equal to the rectangle whose height is equal to the price and whose width is equal to the total quantity consumed.. As prices increase, consumer surplus decreases. See Robert S. Pindyck and Daniel L. Rubinfeld, *Microeconomics*. New York: Macmillan Publishing Company, 1992. (p. 114).

⁶⁵⁴ Dr. MacAvoy adopts a DMA as his unit of observation and uses average revenue per subscriber in the DMA as a proxy for price. NRTC Comments, MacAvoy Declaration at 42.

⁶⁵⁵ NRTC Comments, MacAvoy Declaration, Table Six.

⁶⁵⁶ Declaration of Paul W. MacAvoy on Behalf of the National Rural Telecommunications Cooperative, at 51.

⁶⁵⁷ Mr. Sidak's estimated pre-merger price is based on data, supplied by Pegasus, concerning its average revenue per customer.

DBS of -2.5 to calculate an implied marginal cost of \$37.40.⁶⁵⁸ Then using the monopoly pricing rule, Mr. Sidak derives a predicted post-merger price of \$62.35, which represents a markup of price over marginal cost of approximately 40%.⁶⁵⁹

10. For areas served by cable, Mr. Sidak uses both the Cournot and Bertrand oligopoly models to estimate post-merger prices and associated consumer welfare losses.⁶⁶⁰ Using the Cournot pricing rule, an assumed own elasticity of demand for DBS of -2.75 and estimates of pre-merger prices derived from average revenue per customer, Mr. Sidak calculates an implied marginal cost for DBS. He then derives a post-merger price for the combined DBS provider of \$52.85. This represents a price-cost markup of 18.1% and an increase of 7.28 % over current EchoStar prices.⁶⁶¹

11. Mr. Sidak then uses the Bertrand model to calculate an alternative estimate of the loss in consumer surplus. Under this alternative scenario, Mr. Sidak first assumes own price elasticities of demand of -3.0 for EchoStar and DirecTV and -1.95 for cable.⁶⁶² He then derives estimates of the cross elasticity of demand between EchoStar and DirecTV. These estimates are based on the relationship between the diversion ratio and market shares. For market share data, Sidak uses the FCC's 2001 *Video Competition Report*.⁶⁶³ For comparative price and estimates of marginal cost, Sidak relies on Morgan Stanley Dean Witter's estimate of average revenue per unit for DirecTV and EchoStar. Using these estimates of the own-price and cross-price elasticities of demand and estimates of market shares and marginal costs for each of the three MVPD service providers, Mr. Sidak concludes that the prices for EchoStar and DirecTV offerings would increase by 4.0% and 1.4%, respectively.⁶⁶⁴ He further concludes that the number of EchoStar subscribers would fall by 8.0%.⁶⁶⁵

12. Based on these calculations, Mr. Sidak estimates that the total annual deadweight loss⁶⁶⁶ from the proposed merger would be \$397 million under the Cournot pricing rule and \$383 million under

⁶⁵⁸ Mr. Sidak bases his estimate of pre-merger prices on an estimate of DirecTV's average revenue per unit. The Cournot pricing rule and an assumption of two firms is used to back out the marginal cost. NAB Comments, Sidak Declaration at 20-21.

⁶⁵⁹ *Id.* at 22.

⁶⁶⁰ In the case of Cournot competition, the structural equation is: $\frac{(p-c)}{p} = \frac{HHI}{-10000 \cdot \eta}$, where p is the market price, c is the industry average marginal cost, HHI is the Herfindahl Hirschman Index, and η is the market elasticity of demand. In the case of Bertrand competition, the structural equation for each firm i , is: $p_i = \frac{c_i \eta_i}{(\eta_i - 1)}$ where p_i is the price of the good set by firm i , c_i is the marginal cost of firm i , and η_i is the own price elasticity of demand for good i .

⁶⁶¹ NAB Comments, Sidak Declaration at 23-24.

⁶⁶² Mr. Sidak calculates a cross-price elasticity of demand between EchoStar and DIRECTV of 0.184, and a cross-price elasticity of demand between DirecTV and EchoStar 0.298. *Id.* at 28.

⁶⁶³ *Annual Assessment of the Status of Competition in the Market for the Delivery of Video Programming*, 17 FCC Record 1244 (2002).

⁶⁶⁴ In performing this calculation, Mr. Sidak assumes that, after the merger, New EchoStar will chooses two prices -the price for EchoStar and the price for DirecTV – so as to maximize the joint profits of the merged entity. *Id.* at 26.

⁶⁶⁵ *Id.* at 28.

⁶⁶⁶ The deadweight loss is the loss in *total* surplus, including both consumers' surplus and producers' surplus that results from a rise in price. Broadly speaking, it is the triangular area under the demand curve whose height represents the change in price and whose base is the change in quantity demanded that results from the increase in

(continued...)

the Bertrand pricing rule.⁶⁶⁷ Under the Cournot framework, the total annual consumer welfare loss is \$691.1 million. Using the Bertrand model, annual consumer welfare losses are \$704.1 million.⁶⁶⁸ Finally, Mr. Sidak estimates that, under a perfectly collusive outcome, the deadweight loss would rise to \$1.16 billion per year.

C. Applicants' Merger Simulation Analysis

13. To rebut allegations that the merger will result in substantial consumer harms, the Applicants' present their own merger simulation analysis. Their merger simulation projects that the proposed merger is likely to offer **REDACTED** of net benefits to consumers. This benefit consists of two components. First, the benefits from the extension of local-into-local service to all DMAs are estimated to be **REDACTED** per year. Second, the projected reduction in marginal costs lowers MVPD prices which increase consumer surplus by **REDACTED** per year.⁶⁶⁹ The Applicants' merger simulation is described and evaluated below.⁶⁷⁰

1. Description of the Applicants' Model

14. The Applicants develop the four pieces of information required for the simulation through a combination of econometric estimation, calibration, and inference. The Applicants undertake to estimate the functional form of demand rather than assume or infer values for the price elasticities. To model MVPD demand, the Applicants, following the work of Steven Berry, adopt a discrete choice model known as the "nested logit."⁶⁷¹ In this model a consumer's decision process can be thought of as a series of sequential steps. In the first stage, the Applicants assume that a consumer chooses between over-the-air television, cable service, and the DBS product group, or "nest," containing EchoStar and DirecTV service. If the consumer chooses the DBS product group, he then must select between DirecTV or EchoStar service. In addition, the econometrician must select one of the goods as the outside good. The outside good is the good by which the "quality" of all the other goods is compared. The Applicants treat over-the-air television as the outside good. The functional form, along with the choice of the outside good, determines the parameters that must be estimated. Three categories of parameters must be estimated: the nest strength parameters, the price parameters, and the mean utility parameters. The specification used by the Applicants requires the estimation of three equations.⁶⁷²

(...continued from previous page)

price. The deadweight loss can be approximated by the formula for the area of a triangle: $\frac{1}{2} (P_1 - P_0) (Q_0 - Q_1)$. See, W. KIP VISCUSI, JOHN M. VERNON & JOSHEPH E. HARRINGTON, JR., *ECONOMICS OF REGULATION AND ANTITRUST* 86-88 (3d ed. 2000); F.M. SCHERER, *INDUSTRIAL MARKET STRUCTURE AND ECONOMIC PERFORMANCE* 24-25 (1990).

⁶⁶⁷ *Id.* at 29. Mr. Sidak further claims that the majority of the deadweight loss would occur in areas not passed by cable television systems, where both the increase in price and the decrease in the number of DBS subscribers would be higher than in areas passed by cable television systems. *Id.*

⁶⁶⁸ *Id.* at 29. The consumer welfare loss is the sum of the deadweight loss plus any surplus that is transferred from consumers to producers. The consumer welfare loss thus will always exceed the deadweight welfare loss associated with an increase in market power.

⁶⁶⁹ Letter from Applicants to Marlene Dortch, Secretary, FCC, Attachment ("Analysis of the EchoStar-Hughes Merger: Competitive Effects and National Pricing"), transmitted by letter from the Applicants to Marlene Dortch (June 27, 2002) at 53. ("Applicants June 27, 2002 Competitive Effects Ex Parte").

⁶⁷⁰ An evaluation of the claimed benefits of increases local-into-local service is contained in Section V.C *supra*.

⁶⁷¹ Steven T. Berry, *Estimating Discrete Choice Models of Product Differentiation*, 25 RAND J. ECON. 242 (1994).

⁶⁷² The three equations are the cable equation: $\ln(S_C) - \ln(S_A) = X_C \beta + \alpha p_C + \xi_C$,

(continued...)

15. One problem that arises when using market-level data to estimate the nested logit model is that it is not possible to obtain consistent estimates of the nest strength and price parameters using simple regression methods.⁶⁷³ A technique known as instrumental variables estimation is required to ensure that the estimated parameters are consistent. Ideally, one would jointly estimate the values of all of the parameters of demand using a systems instrumental variable approach.⁶⁷⁴ Application of an instrumental variables technique, however, can be difficult since it requires the existence of other variables, referred to as instruments, with distinct characteristics.⁶⁷⁵ The Applicants report they are unable to find appropriate instruments to allow consistent estimation of the nest strength parameter.⁶⁷⁶ Instead, they use the underlying functional form of demand in the nested logit model to develop a relationship between the nest strength parameter, market shares, and the diversion ratio.⁶⁷⁷ The value of the nest strength parameter is inferred from this relationship. The Applicants also encounter difficulties when estimating the parameters on price in the system of demand. They report that they are unable to develop sufficient variation in the price of their own products to accurately estimate the effect of DBS prices on consumer choice. The Applicants resort to estimating the parameter on the price of cable and assume that the parameter value also holds for the two DBS products.

16. The final sets of parameters necessary to fully specify demand are the mean utility levels for each product in each market. If certain measurable aspects of product quality are expected to change following the merger, the impact of these quality elements on mean utility can be estimated at this stage. The Applicants propose that their merger will lead to a wider deployment of satellite delivery of local broadcast stations. Given the difficulties in estimating the other parameters describing demand for the DBS products, the Applicants simply calculate the value of mean utility for each product in each market that makes the market shares predicted by the demand system equal to those observed. The effect of the expansion of DBS local-into-local service is estimated at a later stage.

(...continued from previous page)

the EchoStar equation: $\ln(S_E) - \ln(S_A) = X_E \beta + \alpha p_E + \sigma \ln\left(\frac{S_E}{S_E + S_D}\right) + \xi_E$, and

the DirecTV equation: $\ln(S_D) - \ln(S_A) = X_D \beta + \alpha p_D + \sigma \ln\left(\frac{S_D}{S_E + S_D}\right) + \xi_D$,

where S_A , S_C , S_E , and S_D are the market shares of over-the-air television, cable, EchoStar, and DirecTV. The mean utility parameters are $X\beta$ and ξ , the price parameter is α , and the nest strength parameter is σ .

⁶⁷³ A consistent estimator is one for which the parameter estimate converges to the parameter value of the population as sample size increases. See Takeshi Amemiya, *ADVANCED ECONOMETRICS*, Harvard University Press, 1985 at 95.

⁶⁷⁴ JEFFREY M. WOOLDRIDGE, *ECONOMETRIC ANALYSIS OF CROSS SECTION AND PANEL DATA*, MIT Press, 2002, Chapter 8.

⁶⁷⁵ The instruments must be correlated with the within-group shares, $\ln\left(\frac{S_D}{S_E + S_D}\right)$ and $\ln\left(\frac{S_E}{S_E + S_D}\right)$, and uncorrelated with ξ .

⁶⁷⁶ Technically, the Applicants were unable to estimate the nest strength parameter with any precision. The Applicants' results indicate that the nest strength parameter lies between -4.2 and 4.0 with a probability of 95%. See Letter from Applicants to Marlene Dortch, Secretary, FCC, Attachment ("IVs_for_sigma.log"), transmitted by letter from the Applicants to Marlene Dortch (August 19, 2002).

⁶⁷⁷ The diversion ratio is defined as the fraction of sales lost due to a price increase by one of the merging products that would be captured by the other merging product.

17. The Applicants next estimate the marginal costs of the products and adjust for post-merger efficiencies. This stage incorporates the estimated demand parameters with assumptions about the competitive interaction of the firms to infer current marginal costs. The Applicants assume Bertrand competition, *i.e.*, that all firms in all markets set prices that maximize profits. This behavioral assumption implies a unique set of marginal costs that would generate the prices and quantities observed in the marketplace. The Applicants calculate this set of marginal costs and assume that these are the current costs of the firms. The Applicants also introduce the reductions to marginal cost that are expected to result from the merger at this stage. These reductions are applied to the current marginal costs to obtain an estimate of the marginal costs of the firms following the merger.

18. Once the demand and the marginal costs of the products are fully specified, the post-merger behavior of the firms can be simulated to predict the prices and quantities that are likely to result from the merger. This calculation involves the estimated demand functions as well as the estimated post-merger marginal costs. The differences in the post-merger world must also be accounted for at this stage as well. One change is that a single firm will now set the national prices for the two DBS products. The merged firm will set national prices of the two DBS products so that the sum of profits from the two products is maximized. The other change is that the marginal cost of the two DBS products is lower due to merger efficiencies. Up to this point, the analysis has only examined the 4,984 cable franchise areas in the sample. At this stage, the areas where no cable is available must be accounted for. This additional market must be included in the profit-maximizing decision process of the firms as well.⁶⁷⁸ Given this structure, a set of prices and quantities that will hold in each market following the merger can be calculated. The changes in prices are then converted into changes in welfare in each of the markets.

19. In a standard merger simulation analysis, the analysis would be completed at this stage. However, due to some of the problems with estimating the demand system, the Applicants must make further adjustments. The Applicants account for the effect of the expansion of local-into-local service into DMAs ranked 71-210. Two specific effects are measured – the direct effect of an increase in the quality of DBS on DBS consumers, and the indirect effect the increased quality will have on cable consumers through the pricing reactions of cable companies.

20. Estimating the direct effect proceeds in two steps. In the first step, the Applicants use the past history of the introduction of local-into-local service to predict the likely increases in DBS market shares that would result from the introduction of local-into-local service in new markets. In step two the Applicants convert this into a dollar value by calculating the equivalent decrease in DBS prices that would generate a similar increase in DBS market shares. The Applicants claim this represents the value the average consumer places on the introduction of local-into-local service.

21. According to the Applicants, the indirect effect of expansion of local-into-local service occurs because cable companies must compete more vigorously against the higher quality DBS competitor. As in measuring the direct effect, the Applicants measure the indirect effect by observing the outcomes in markets where local-into-local has already been introduced. The outcome to be measured here is a reduction in the cable rates relative to what they would have been in the absence of local-into-local service. Once the predicted cable rate “reduction” has been obtained, this dollar value is assumed to benefit all cable subscribers in DMAs ranked 71-210, as well as those who switch to cable as a result of the lower price.

22. The Applicants estimate the benefits from the extension of local-into-local service to all DMAs to be **REDACTED** per year. This amount is combined with the Applicants’ claimed net benefits

⁶⁷⁸ The addition of the area not served by cable brings the number of markets included in the simulation to 4,985.

of **REDACTED** per year due to the reductions in marginal costs to obtain an overall estimated net benefit from the merger of **REDACTED** per year.⁶⁷⁹

2. Critique of Applicants' Merger Simulation Analysis

23. Our most serious reservations about the Applicants' merger simulation lie with their demand estimation and resulting estimates of elasticity. The Applicants estimate the own-price elasticity of demand for EchoStar to be **REDACTED** and **REDACTED** for DirecTV, and further estimate that the cross-price elasticities of demand for DirecTV and EchoStar are respectively **REDACTED** and **REDACTED** with respect to the prices the other DBS provider.⁶⁸⁰ These firm-level elasticities imply a price elasticity of demand for DBS of **REDACTED** and a price elasticity of demand for MPVD of **REDACTED**.

24. As we noted earlier, the Applicants have used over-the-air television to be the "outside good" in their nested logit model of MVPD demand. The model requires that the mean utility, or "quality," of the outside good be constant across all markets.⁶⁸¹ However this basic assumption clearly fails to hold here because the "quality" of over-the-air television exhibits substantial variation across different markets. In the Glendive Montana DMA there is one full-power television station, while the Los Angeles DMA has twenty-four. Very few consumers would consider over-the-air television to be equal in those two DMAs. The end results of this misspecification is that the calibrated mean utilities of cable and DBS service are biased downwards in markets with higher quality over-the-air television and upwards in markets with lower quality broadcast television. Since markets with higher quality over-the-air television tend to have larger populations, we believe the aggregate effect is to underestimate the value consumers place on cable and DBS services, and therefore an underestimation of the market power possessed by MPVD producers.

25. The nested logit structure used by the Applicants is generally preferred over the "flat logit," that is the choice model where the consumer only makes a "one step decision" rather than the sequential choice process outlined above. This is because it imposes fewer restrictions on the cross-price elasticities of demand between the products. However, the nested logit form does impose the same restrictions as the flat logit at each step of the decision process. It is only when moving between steps that these restrictions are relaxed.⁶⁸² The implication for the decision process chosen by the Applicants is that customers choosing to leave the DBS product group following a price rise must move into cable and over-the-air television in proportion to the existing market shares of cable and over-the-air television. The nesting structure thus imposes the constraint that **REDACTED** of the customers leaving the DBS market must shift to over-the-air television, while the remaining **REDACTED** will choose cable.⁶⁸³ This is substantially different from information presented by the Applicants which suggests that the econometric model will overstate the number of persons leaving DBS for over-the-air television by **REDACTED**.⁶⁸⁴ This forces us to question the appropriateness of the nesting structure chosen by the

⁶⁷⁹ Letter from Applicants to Marlene Dortch, Secretary, FCC, Attachment ("Analysis of the EchoStar-Hughes Merger: Competitive Effects and National Pricing"), transmitted by letter from the Applicants to Marlene Dortch (June 27, 2002) at 53. ("Applicants June 27, 2002 Competitive Effects Ex Parte").

⁶⁸⁰ Letter from Applicants to Marlene Dortch, Secretary, FCC, Attachment ("Scaled_div13-17.6_Simulation.nb"), transmitted by letter from the Applicants to Marlene Dortch (August 19, 2002).

⁶⁸¹ Berry (1994) at 253.

⁶⁸² Greene, *ECONOMETRIC ANALYSIS*, 4th Edition, New Jersey: Prentice Hall, 2000 at 870.

⁶⁸³ Letter from Applicants to Marlene Dortch, Secretary, FCC, Attachment ("logit_regressions.log"), transmitted by letter from the Applicants to Marlene Dortch (July 12, 2002).

⁶⁸⁴ Applicants June 27, 2002 Competitive Effects Ex Parte at 8.

Applicants. If the basic structure chosen by the Applicants is mis-specified, the estimated parameters will bear no relationship to the true population parameters that govern the behavior of consumers and be useless in predicting how consumers will respond to changes in the prices and qualities of the products in this market.

26. The Applicants claim that they were unable to find an appropriate instrument for estimating the nest strength parameter, instead calibrate it. Using information on the percent of customers switching from DirecTV to EchoStar due to price and cost reasons, the nest strength parameter is calibrated based upon the diversion ratio. We find this procedure questionable for a number of reasons. Calibration in merger simulation models is traditionally done following estimation of the demand parameters, not prior to the estimation.⁶⁸⁵ To the extent that this calibration is limiting the responses of consumers to price, it is inappropriate and prejudices the results. The diversion ratio is derived from interviews DirecTV conducts with customers that have, voluntarily or involuntarily, dropped service. The Applicants have chosen to use **REDACTED** to calibrate the nest strength parameter. This ratio reflects the percent of DirecTV customers switching to EchoStar for claimed price and cost reasons in the survey. The Applicants reason that the diversion ratio can be directly related to price elasticities. We note that the diversion ratio for all surveyed customers between July 1999 and December 2001 was **REDACTED**, and for those customers that voluntarily left DirecTV it was **REDACTED**. The diversion ratio was over **REDACTED** among households in non-cabled areas that voluntarily left DirecTV in 2001.⁶⁸⁶ A higher diversion ratio implies that EchoStar and DirecTV are closer substitutes and that post-merger prices are likely to be higher than those estimated by the Applicants.

27. The next step in the demand estimation stage is to estimate the parameter on price. The Applicants did not use variations in DBS pricing or variations in the equipment and installation charges to estimate this parameter. Instead, the price parameter is estimated solely on information about the cable systems and cable prices. Material submitted by the Applicants clearly indicates that this assumption may be appropriate when price is normalized to be per unit of volume or weight or other appropriate measure of quantity, however that is not the case with these data.⁶⁸⁷ In fact, the Applicants appear to disregard the self-imposed constraint as well. When estimating the price parameter using cable system data, they separate the sample in two, one group of cable systems offering expanded basic tiers and the other group not offering those tiers. Estimation of the price parameter is done separately for each sub-sample. The resulting estimates are then averaged to get a final value which is used in the model. This procedure is highly questionable. While one might wish to argue that cable systems without expanded basic tiers offer substantially different products, this differentiation is exactly the sort that the Berry model, used by the Applicants is intended to address. If the Applicants believe that the price elasticities in areas served by cable systems without an expanded basic tier are significantly different, then the full simulation, including calibration of the nest strength parameter, should be performed separately for each sub-sample. These issues with the estimation and application of the price parameter lead us to question whether the Applicants estimated parameter bears any relationship whatsoever to the influence of price on the decision to purchase DBS services.

28. In order to simulate the post-merger MPVD industry, the Applicants adjust the calibrated pre-merger marginal costs for the merger-specific cost reductions that they anticipate. We have numerous

⁶⁸⁵ Werden (1997) at 376.

⁶⁸⁶ Letter from Applicants to Marlene Dortch, Secretary, FCC, Attachment (“churn 1201 data.zip”), transmitted by letter from the Applicants to Marlene Dortch (July 12, 2002).

⁶⁸⁷ Gregory J. Werden & Luke M. Froeb, *The Effects of Mergers in Differentiated Products Industries: Logit Demand and Merger Policy*, 10 J. L., ECON. & ORG. 407 (1994) at fn. 5. Also see Margaret E. Slade, *Market Power and Joint Dominance in UK Brewing*, Working Paper, Department of Economics, University of British Columbia, May 2002 for an application that does not assume the parameters on price are equal.

concerns with their hypothesized cost reductions. For example many of the benefits seems to affect fixed costs and so it is unlikely that there would be any benefit to consumers. Moreover some of the cost savings such as reduced subscriber acquisition costs may reflect a lowering of the subsidy in equipment and installation that the Applicants now offer, and so harm consumers. Other benefits were too speculative or lacked credibility. These concerns were addressed in detail in our discussion of the Applicants claimed benefits in Section V.C. *supra*.

29. In summary, we find the Applicants model to be severely flawed and their results highly suspect. At the most fundamental level the Applicant's nested logit model is a complete misspecification of a model for individuals not served by cable. Consumers without access to cable have the choice between DirecTV, EchoStar, and over-the-air. In fact, the most critical step in the construction of any discrete choice model is the accurate delineation of the choice set of individuals in the market. The Applicant's model fails to reflect the actual choices of consumers without access to cable. This failure results in flawed model that cannot be corrected on an ad hoc basis. The correct modeling of consumer's choices of MVPD services requires separate models for both consumers without access to cable and consumers with access to cable. Moreover, the Applicants use of churn data is an additional failure to recognize that consumers without access to cable cannot churn to cable. Use of the Applicant's churn data and nested logit model is incorrect and cannot represent the choices of consumers without access to cable or the sensitivity to price of consumers without access to cable. As a result we find that we can give little credence to their estimates of the demand for MPVD products or the projected consumer benefits that the Applicants claim will result from the merger.

3. Staff Merger Simulation Sensitivity Analysis:

30. The Commission staff also undertook a sensitivity analysis of the Applicants' merger simulation.⁶⁸⁸ We estimated the range of magnitudes of harm that MVPD consumers are likely to experience if the proposed merger is approved. Our measure of consumer welfare loss is the loss in consumer surplus. The central question is by how much consumer surplus decreases when price increases. As explained above, the record suggests that the two DBS services are closer substitutes to each other than DBS is to cable. In the Applicants' model this degree of substitutability is affected by the "nest strength" parameter. Table 1 below indicates the magnitude of consumer losses that result in the Applicants model for modest increases in the nest strength parameter. It demonstrates that for small increases in this parameter above those assumed by the Applicants, consumer harms are likely to be significant. If most consumers view the two services as close substitutes, then the nest strength parameter would be very close to one. This appears likely given the similar product offerings, similar pricing, and the similar technology for delivery (satellite transmission, satellite dish and set-top box) used by the Applicants. In such a case, estimated consumer losses in the Applicants' model would be significantly greater.

⁶⁸⁸ We note that we are unable to rely definitively on either Mr. Sidak's or Dr. MacAvoy's welfare calculations, because we lack confidence in the demand elasticities they use for their calculations. In particular, Mr. Sidak assumes that the DBS own price elasticity is equal to the cable price, elasticity, -2.5, in areas with cable and somewhat higher, -2.75 in areas with cable. NAB Comments, Sidak Declaration at 24. Thus, these elasticity estimates are merely informed guesses rather than econometric estimates. We also have concerns with the elasticity estimates used by Dr. MacAvoy. In particular, while we recognize the difficulties in obtaining data, we are concerned about Dr. MacAvoy's use of regional variation in average revenue per customer as a proxy for price variation. NRTC Comments, MacAvoy Declaration at 42.

REDACTED TABLE

31. The above described sensitivity analysis used the Applicants' model assumes that : (1) consumers have a choice of over-the-air television, cable, or either DBS provider; (2) that the competitors engage in Bertrand competition; and (3) that the DBS providers charge a single national price. In reality, however, many customers, particularly in rural areas, do not have access to cable. In addition, as discussed above, we find that New EchoStar would have the incentive to price discriminate across geographic regions and therefore the profit maximizing prices would differ in different geographic regions. In order to address these unrealistic assumptions in the Applicants' model, the Commission staff undertook a further sensitivity analysis that assumed Cournot behavior and took account of the fact that some customers lacked access to cable.

32. The Commission staff's merger simulation found that the estimated elasticities of demand used by the Applicants to be unrealistic and overly sensitive to questionable assumptions. Staff also questioned the usefulness of the simulation developed by Mr. Sidak on behalf of NAB. Mr. Sidak simply assumes a value for the elasticity and proceeds from there. This is not an approach that we are willing to pursue. Our preference is for a simulation that relies as much as possible on actual observation of consumer behavior rather than broad assumptions. Similarly, staff found that we cannot use the simulation provided by Dr. MacAvoy on behalf of NRTC. MacAvoy's simulation only examines the impact of the merger on areas lacking access to cable television. We believe that a reasonable simulation must examine a broader spectrum of areas served by the Applicants.

33. Actual price and cost data are available to us from the record. These data and the equilibrium conditions of the Cournot model of firm behavior are used in our analysis to infer an elasticity. We tentatively use this elasticity to evaluate possible effects of the merger until additional verifiable and reliable econometric evidence is presented in hearing.

34. We begin our analysis of consumer welfare with prices for the most popular services of the present DBS competitors. EchoStar's most popular service is "America's Top 100." The most popular service offering of DirecTV is "Total Choice." We assume that DBS firms maximize their profit both before and after the merger. The pre-merger prices are known for EchoStar's "America's Top 100" and DirecTV's "Total Choice." The pre-merger price of America's Top 100 submitted was **REDACTED**⁶⁸⁹ and "Total Choice" is **REDACTED**.⁶⁹⁰

35. Given marginal costs of firms in the market and the number of firms in the market (2), we calculate a composite price (average price) and a composite marginal cost (average cost). Then, an implied market elasticity is calculated. Our calculated implied market elasticity is **REDACTED** a year. In addition the Commission staff examined the likely impact of the merger in the Cournot model considering both, price discrimination between cabled and uncabled areas, and a uniform national price. These estimates of losses are based on the actual costs of firms, prices of the firm, and implied own-price elasticities of demand. Thus, we again find that the likely magnitude of the harms is significant. Moreover, the value of the efficiencies necessary to counterbalance these harms significantly exceed the Applicants' own claimed benefits, which, as we discuss above, are not supported by the record.

⁶⁸⁹ This calculation is based on confidential information on programming, churn, and equipment costs supplied by the Applicants. See Response to Feb 4th 2002 EchoStar's Data Request Interrogatories Tab 14-20 Exhibit VII-1, Exhibit VIII-2, Exhibit 8-c, Exhibit IV (A) -1 and Exhibit V(B) (1), Exhibit VI(A)(2) .

⁶⁹⁰ This calculation is similarly based on confidential information on programming, churn, and equipment costs supplied by the Applicants. See Response to Feb 4th 2002 DirecTV Data Request Interrogatory Schedule VIII(a). Latham and Watkins July 18 2002 ex parte Schedule VI.B.a.(i)

STATEMENT OF CHAIRMAN MICHAEL K. POWELL

Re: *Application of EchoStar Communications Corporation (EchoStar); General Motors Corporation and Hughes Electronics Corporation (DirecTV)*

Today, the Commission has declined to approve the merger of EchoStar and DirecTV. The record in this case compels this result. The combination of EchoStar and DirecTV would have us replace a vibrant competitive market with a regulated monopoly. This flies in the face of three decades of communications policy that has sought ways to eliminate the need for regulation by fostering greater competition. I decline the invitation to turn our national communications policy back so many years.

The record before us irrefutably demonstrates that the proposed merger would eliminate an *existing viable competitor in every market in the country*. The case against approving the transfer application is particularly compelling with respect to residents of rural America who are not served by any cable operator. Those Americans would be left with only one choice for their subscription video service, now and in the foreseeable future. But that alone is not the cornerstone of our decision. At best, this merger would create a duopoly in areas served by cable; at worst it would create a merger to monopoly in unserved areas. Either result would decrease incentives to reduce prices, increase the risk of collusion, and inevitably result in less innovation and fewer benefits to consumers. That is the antithesis of what the public interest demands.

DirecTV and EchoStar propose a “national pricing” condition, to alleviate the competitive harms of this transaction. Under this plan, EchoStar and DirecTV would have us replace healthy competition with a monopoly governed by a scheme of regulated pricing. The Communications Act and the Commission’s overall policy goals aim at replacing regulated monopoly service providers with free market competition among multiple service providers. If economic history has taught us anything, it is that healthy competitive markets, not regulated monopolies maximize consumer welfare.

The Merger Application rests on the following claims; (1) EchoStar and DirecTV only compete with cable but not with each other; (2) Standing alone they are weak competitors to cable; (3) Absent the merger, the applicants cannot provide “local into local” broadcast services.

The facts undermine these claims. First, the record shows that EchoStar and DirecTV compete vigorously, not only with cable, but with each other. Second, neither operator is failing in its efforts to compete against cable. DBS subscriber growth rates are 2.5 times larger than those of cable. Cable is attempting to respond to the DBS threat by increasing channel capacity and adding new services for consumers. Third, the record shows that each company standing alone will be capable of offering local broadcast stations to 80-85% of American homes in a very short period of time. They have the economic incentive to do so, since both EchoStar and DirecTV are much stronger competitors to cable in markets where they offer “local into local” service.

In short, the very premises upon which this proposed merger rest are themselves without foundation.

The DBS story so far is one of successful, intra-modal, facilities-based competition. This competition has led to more innovation, more programming, and more subscribers; exactly the benefits one would expect. For those who believe, as I do, that these benefits flow from competition between DBS providers, the elimination of that competition, absent a more compelling showing, cannot be squared with the public interest.

**SEPARATE STATEMENT OF
COMMISSIONER KATHLEEN Q. ABERNATHY**

Re: Application of EchoStar Communications Corporation (a Nevada Corporation), General Motors Corporation, and Hughes Electronics Corporation (Delaware Corporations) (Transferors) and EchoStar Communications Corporation (a Delaware Corporation) (Transferee), CS Docket No. 01-348 (adopted October 9, 2002).

I am unable to find, based on the record before me, that the proposed transaction serves the public interest, convenience, and necessity and I therefore support designating this application for hearing. I start with the premise that a proposed merger generally creates efficiencies for the combined entity and those efficiencies may ultimately benefit consumers. But the inquiry cannot end there. We must determine what effect the merger will have on the state of competition in the relevant market and whether the efficiencies created by the merger will be passed on as benefits to consumers in the form of better services and lower prices. The Commission must then balance the potential benefits against the potential harms of the merger. The Commission's review goes beyond traditional antitrust considerations to encompass a broader public interest analysis.

The record developed thus far demonstrates that this proposed merger will likely harm consumers by eliminating a viable competitor in every market, driving up prices, and decreasing innovation and quality of service. The Applicants have not demonstrated any merger-specific public interest benefits that outweigh these harms. More specifically, the proposed merger will substantially increase the level of concentration in an already highly concentrated market. It would at best be a merger to duopoly in markets where cable is available, and at worst a merger to monopoly in markets where there are no other competitive multichannel video programming providers. It does not appear that the Applicants' commitment to a national pricing plan, coupled with competition from cable in certain areas, will provide a sufficient competitive check on the merged entity. Furthermore, the high level of concentration resulting from the merger will likely reduce, rather than increase, the Applicants' incentives to carry through on many of the conceivable merger benefits, such as expanding local-into-local programming into all markets.

I have no doubt that business combinations in the multichannel video market may be pro-consumer, and it would be a mistake to equate bigness with badness. But our task is to review only the application in front of us and to weigh the potential benefits against the threats to competition. On this record, I am forced to conclude that the public interest would not be served by granting the application.

**SEPARATE STATEMENT OF
COMMISSIONER MICHAEL J. COPPS**

Re: In the Matter of Application of EchoStar Communications Corporation (a Nevada Corporation), General Motors Corporation, and Hughes Electronics Corporation (Delaware Corporations), Transferors, and EchoStar Communications Corporation (a Delaware corporation), Transferee, CS Docket No.01-348

I support the decision to set this proposed merger for hearing. Based on the evidence presented, I simply cannot see how the consumer benefits that Applicants claim will flow from the merger would actually be realized, much less guaranteed. In particular, I have heard from many rural stakeholder groups concerning this proposed merger, and the overwhelming majority have either opposed it or been highly skeptical that this combination would bring the benefits Applicants claim. Furthermore, it would be an enormous risk to approve a transaction that results, at best, in the merger of a duopoly into a monopoly in a critical sector of multi-channel video programming.

Many people's first reaction – certainly mine – to this proposed merger was to think of its monopoly implications. Nevertheless, I have said many times that every proposed combination coming before this Commission deserves to be looked at on its own merits and within its own particular factual and contextual situation, absent ideological judgments or predetermined conclusions of how some idealized marketplace should look. I have attempted to apply this approach here.

But the threat of monopoly kept coming back at me as I examined the proposal. We are asked to take a lot on faith to approve this agreement, yet at the end of the day we can be certain of only one thing: we are eliminating whatever exists of competition in this sector in favor of something that walks and talks and looks very much like a monopoly. While some speak at this late date of altering the agreement again so as to encourage the development of a second player, the facts are these: (1) a second player exists now, unless we approve the merger; and (2) expecting a new, unformed entity to come in and compete successfully with a merged EchoStar and DirecTV is to dream the impossible dream, especially in light of the capital starvation that continues to stalk this sector. Were this merger to proceed as presented, the likelihood of another satellite provider entering the market in the near future – and being able to compete effectively with the huge merged entity Applicants seek to create – would be so tiny as to be almost invisible.

At the end of the day, the Applicants are asking us to find that eliminating a current, viable competitor from every market in the country would somehow serve the public interest. Congress instructed us to encourage *competition*. The people's representatives recognize the power of competition to give choices to consumers – choices of services, choices of technology, choices of providers, choices of sources of content. This proposed merger raises such significant concerns because, for the vast majority of consumers, it would result in a *reduction* in competition, reducing the number of multi-channel video programming providers for many consumers from three to two, or from two-to-one, depending on whether the consumer today has access to cable service.

Moreover, even if the Applicants were required to implement their proposed uniform national pricing scheme – which they claim would ameliorate some of the competitive concerns raised in this *Order* – effective enforcement of such a commitment would require significant levels of regulatory oversight. I am not persuaded that this particular Commission has the appetite for such extensive regulatory oversight.

Lately we are told that this proposed merger could *potentially* bring benefits to consumers by forcing cable rates down. It is an interesting but unproven theory. One could as easily argue, with better historical factuality, that instead of cable prices being forced down, monopoly DBS prices would in the end go up. Moreover, I cannot agree with those who argue that the only way to fight one entrenched industry is to create a monopoly in a closely related industry. Competition in the media industry should really be something more than two guys from High Noon facing off in the street to see who is left standing after the gunsmoke clears.

The overwhelming input I have received from rural America – by no means uniform but certainly preponderant – is that this agreement has the potential to wreak great havoc across our towns and farms and valleys. “Not necessarily so,” some say, but the future of rural America must never be subject to a roll of the dice from the Commission because a few believe that somehow such an unprecedented combination of commercial power will be dedicated to rural development. That is playing fast and loose with too many Americans whose future is challenging enough without our foisting upon them a monopoly that could further erode their well-being and independence. I am simply not convinced that the evidence in the record before us supports a finding that allowing the transaction to proceed *would* bring those benefits. And therefore, based on my analysis of the evidence that has been presented, I do not believe that the Applicants have met their burden to demonstrate that this merger would serve the “public interest, convenience and necessity.”

With respect to the concerns raised about EchoStar’s two-dish policy and its compliance with the terms of the Satellite Home Viewer Improvement Act of 1999 (“SHVIA”) and our rules, I wish to make it perfectly clear that I remain wholeheartedly supportive of the finding that EchoStar violated the nondiscrimination provision of SHVIA and § 76.66(i) of the Commission’s rules. However, I believe that it would be more appropriate for the Commission to address the issues raised by EchoStar’s two-dish policy in a separate proceeding dedicated specifically to that issue. EchoStar has had some time to take steps to come into compliance with SHVIA and our rules, but the Commission has not yet had an opportunity to weigh in on this matter. As this *Order* points out, the matter of EchoStar’s compliance with our rules and SHVIA is currently subject to decision by the full Commission, pursuant to three applications for review filed in response to the Bureau’s Order. I hope and expect that these proceedings will be moved along expeditiously. Once we review this matter, our findings could be incorporated into the hearing proceeding on the proposed merger.

Reviewing this proposal has been a challenge. Even now, parties are preparing new ideas and alterations. I continue to believe that the public’s business can be more expeditiously and effectively transacted when applicants present their best possible deal up front, keeping changes to an absolute minimum, and not waiting until the last possible moment to change the terms of play. Our review process should not have to include sitting across the table from applicants trying to anticipate last minute changes in strategy.

That being said, our rules do not preclude Applicants from proffering conditions or making amendments to their application that could address the competitive and public interest concerns we have with the proposed merger. I believe that the designated hearing process is capable of addressing the concerns, old and new, of the Applicants and arriving at a determination in the public interest.

STATEMENT OF COMMISSIONER KEVIN J. MARTIN

Re: Application of EchoStar Communications Corporation, General Motors Corporation, and Hughes Electronics Corporation (Transferors) and EchoStar Communications Corporation (Transferee), Hearing Designation Order, CS Docket No. 01-348 (adopted October 9, 2002)

I support the Commission's decision to designate this merger for hearing. Generally, I believe market forces are the most effective means of delivering choice, innovation, and affordability to consumers. The Commission nevertheless must be cautious when market transactions would decrease, rather than increase, competition. Based on the current record in this proceeding, I believe the potential harm to competition outweighs the potential benefits, particularly for consumers in rural America. I therefore cannot conclude that the merger as proposed is in the public interest

As I explain below, however, I have two concerns with the Hearing Designation Order. First, I believe the record and our precedent support a conclusion that at least some cable operators and DBS providers compete in the same market. Second, I believe EchoStar's violation of its statutory and regulatory must-carry obligations is sufficiently important and relevant to this merger that the issue should have been designated for hearing.

The Relevant Market for Video Services

As part of its examination of whether a merger is in the public interest, the Commission traditionally has conducted a competitive analysis of the impact that the merger would have on the marketplace. The first step in this endeavour is to define the relevant product market (or markets) to be studied. The Applicants argue that DBS services compete with cable services (where available), and thus the relevant product market is the multichannel video programming distribution ("MVPD") market.⁶⁹¹ This position is consistent with Commission precedent and policy.

The Commission repeatedly has recognized the existence of a MVPD market in which DBS and cable operators compete. As early as 1994, the Commission identified the "relevant product market" for our annual video competition reports as the MVPD market. The Commission concluded that "the relevant product market contemplated in the 1992 Act – multichannel video programming service – is the appropriate starting point for assessing the status of competition in the market for delivery of video programming."⁶⁹² Indeed, in our most recent competition report, the Commission concluded

Overall, the Commission finds that competitive alternatives continue to develop.... The growth of non-cable MVPD subscribers continues to be primarily due to the growth of DBS.... Between June 2000 and June 2001, the number of DBS subscribers grew from almost 13 million households to about 16 million households, which is nearly two and a half times the cable subscriber growth rate.⁶⁹³

⁶⁹¹ I appreciate that many rural consumers do not have access to cable. Cable availability in a given location, however, is not at issue in the "product" market definition. A conclusion that the relevant product market is MVPD would not harm such rural consumers. In areas not served by cable, the "market" would still be MVPD, but the only "players" would be the two DBS providers.

⁶⁹² *Implementation of Section 19 of the Cable Television Consumer Protection and Competition Act of 1992*, First Report, 9 FCC Rcd 7442, ¶ 49 (1994).

⁶⁹³ *Annual Assessment of the Status of Competition in the Market for the Delivery of Video Programming*, Eighth Annual Report, 17 FCC Rcd 1244, ¶ 5, 8 (2002).

Similarly, the Commission discussed the significant competition that has developed between DBS and cable operators in our Further Notice on the cable horizontal ownership limit:

[A]lthough cable continues to be the dominant player in the MVPD market, its market share has diminished somewhat with the emergence and continued growth of competing MVPD providers. Perhaps the most important difference between the industry in 1992 and today is that in 1992 there was no clear nationwide substitute for cable. Today, on the other hand, DBS has a national footprint.... DirecTV now is the third largest MVPD operator, after AT&T and Time Warner, and EchoStar is the eighth largest.⁶⁹⁴

Notably, this Further Notice was issued pursuant to the D.C. Circuit's remand, in which the Court rejected our rule in part because the Commission had failed to adequately consider cable/DBS competition in setting the ownership limit. Indeed, the Court observed "it seems *clear* that in revisiting the horizontal rules the Commission will have to take account of the impact of DBS on [cable's] market power."⁶⁹⁵

Finally, in each of the last three cable mergers, the Commission assessed the competitive impact not on a "cable services" market, but on the MVPD market.⁶⁹⁶

In this Hearing Designation Order, however, the majority is unwilling to conclude that cable and DBS services compete. To the contrary, this Order states, "[i]n fact, the relevant product market may be limited to just DBS services."⁶⁹⁷ This conclusion seems to contradict prior Commission precedent. Defining the relevant product market as DBS services would mean that in urban areas served by cable, our analysis would exclude cable operators as a viable alternative. Such an approach is not reflective of the actual competitive landscape in urban areas and diminishes the real challenges faced by rural consumers to obtain comparable services. Indeed, I am disappointed that the Commission seems to be taking a step away from the conclusion that at least some cable operators and DBS providers compete, despite having repeatedly reached that decision in the past.

The Order justifies its departure from the Commission's past discussions of a MVPD market by noting that although the relevant product market for a cable operator contains cable and DBS services, the

⁶⁹⁴ *Implementation of Section 11 of the Cable Television Consumer Protection and Competition Act of 1992*, Further Notice Of Proposed Rulemaking, 16 FCC Rcd 17,312, ¶ 22-23 (2001) (internal citations omitted).

⁶⁹⁵ *Time Warner Entertainment Co. v. FCC*, 240 F.3d 1126, 1134 (D.C. Cir. 2001) (emphasis added). The Court further elaborated, "If an MVPD refuses to offer new programming, customers with access to an alternative MVPD may switch. The FCC shows no reason why this logic does not apply to the cable industry. Indeed, its most recent competition report suggests that it does. According to the Commission, several very small and rural cable systems have used a variety of schemes to add digital channels, expand their program offerings, and take preemptive action against aggressive DBS marketing." *Id.* (quoting *Annual Assessment of the Status of Competition in the Market for the Delivery of Video Programming*, Seventh Annual Report, 16 FCC Rcd 6005, ¶ 67 (2000)).

⁶⁹⁶ See *Applications of AT&T Corp. and Tele-Communications, Inc. for Transfer of Control of Tele-Communications, Inc. to AT&T Corp.*, CC Docket No. 98-178, Memorandum Opinion and Order, 14 FCC Rcd 3160, ¶ 20-22 (1999); *Applications For Consent To The Transfer Of Control Of Licenses and Section 214 Authorizations From MediaOne Group, Inc., Transferor, To AT&T Corp., Transferee*, Memorandum Opinion and Order, 15 FCC Rcd 9816, ¶ 36 (2000); *Applications for Consent to the Transfer of Control of Licenses and Section 214 Authorizations by Time Warner Inc. and America Online, Inc., Transferors, to AOL Time Warner Inc., Transferee*, Memorandum Opinion and Order, 16 FCC Rcd 6547, ¶ 244 (2001).

⁶⁹⁷ Order at ¶ 115.

relevant product market for a DBS provider might include DBS services and only *some* cable services.⁶⁹⁸ Specifically, the Order hypothesizes that DBS providers compete with low capacity cable operators, but low capacity cable operators do not compete with DBS providers. I find this proposition confusing at best. First, even if true, it would lead to a conclusion that the relevant product market is only high capacity cable and DBS services. Thus, the hypothesis would not support the contention that, “in fact, the relevant product market may be limited to just DBS services.”⁶⁹⁹

Moreover, I have concerns with the assertion that some products may be substitutes or “interchangeable,” but only unilaterally. I question the conclusion that DBS services compete with low capacity cable services, but that low capacity cable services do not compete with DBS services. If the Commission were to say these services do not compete at all, I may or may not agree, but I would understand the argument. One might argue, for instance, that a Ford and a BMW do not compete in the same “car” market because there actually are *two* product markets: the “economy car” market and the “luxury car” market. But can you really claim that BMWs compete with Fords, but that Fords don’t compete with BMWs? It seems highly unlikely that consumers would view some products as true substitutes – *i.e.*, “reasonably interchangeable”⁷⁰⁰ – but only in one direction.

The majority argues that this seemingly odd conclusion is a result of the “hypothetical monopolist” procedure used to define the market:

The relevant product that results from this procedure depends significantly on the products with which one started.... [I]t is entirely possible that we might derive different relevant product markets, given the different starting points.⁷⁰¹

I understand that the hypothetical monopolist test might produce such an atypical result. But that does not mean it is a reasoned analysis to rely on that tool to conclude that cable competes with DBS but that DBS does not compete with cable. Some higher threshold of proof should be met to justify such a conclusion. We must not let our fascination with economic modelling tools, or our appreciation of the “hypothetical monopolist” test, cloud our judgement of what we are really attempting to evaluate: the extent to which consumers view products or services as interchangeable or substitutes.⁷⁰²

Ultimately, the Order states that the Commission is “unable to conclusively resolve the product definition at this time.”⁷⁰³ I find this hesitancy troubling and confusing, particularly in light of our previous conclusions about cable and DBS competition. Moreover, over the course of the last eleven months, the Commission has developed a voluminous record consisting of thousands of pages of documentary evidence. Many of these documents—including economists’ affidavits—address directly the issue of whether and to what extent DBS and cable service compete at least to some degree. I found this evidence sufficient to conclude that these two services do compete, at least to some degree. The Order, however, designates this issue to be resolved by an Administrative Law Judge and concludes that, in fact, the relevant product market may be limited to just DBS services. I am not sure what new evidence would come to light during the hearing process that would make the Commission rethink its

⁶⁹⁸ See Order at ¶ 109 and note 331.

⁶⁹⁹ *Id.* at ¶ 115.

⁷⁰⁰ *United States v. E.I. du Pont de Nemours & Co.*, 351 U.S. 377, 395 (1956) (“commodities reasonably interchangeable by consumers for the same purposes” are in the same market) (“*E.I. du Pont*”).

⁷⁰¹ *Id.* at ¶ 109.

⁷⁰² See *E.I. du Pont*, 351 U.S. at 395.

⁷⁰³ *Id.* at ¶ 114.

precedent and direction. Regardless, I believe the Commission should have used its expert judgement to make a conclusion based on the record we have before us.

Finally, I fear that the Order's reluctance to identify the relevant product market and to conclude unequivocally that DBS providers and at least high-capacity cable operators compete indicates a step back from our recognition in several recent proceedings of the growing importance of intermodal or "platform" competition.⁷⁰⁴

Although the Order does not identify the relevant product market, it proceeds with the competitive analysis by hypothetically assuming that the relevant market is the MVPD market, as the Applicants propose. Accordingly, I concur in the competitive analysis of this Order.

EchoStar's Must-Carry Obligation

It is a basic tenet of our regulatory system that FCC licensees must comply with the Communications Act and our rules. In a license transfer context, we should consider whether the transferee is in compliance with the statute and our rules. Compliance with statutory provisions and FCC rules that are directly related to merger benefits should be particularly important.

Moreover, the Commission's public interest inquiry includes a determination that the applicant has the requisite character to hold a license.⁷⁰⁵ As the attached Order explains, "violations of provisions of the Act, or of the Commission's rules or policies have a bearing on an applicant's character qualifications."⁷⁰⁶

As I explained in a detailed press statement last April, I believe EchoStar is violating the must-carry provisions of the Satellite Home Viewer Improvement Act ("SHVIA") and our rules by placing some broadcasters' signals on a second dish.⁷⁰⁷ I continue to be concerned about the burden this practice

⁷⁰⁴ See, e.g., 2002 Biennial Regulatory Review, *Review of the Commission's Broadcast Ownership Rules and Other Rules Adopted Pursuant to Section 202 of the Telecommunications Act of 1996*, Notice of Proposed Rulemaking, MB Docket No. 02-277, FCC 02-249, ¶ 53 (rel. Sept. 23, 2002) (discussing "robust" competition among broadcasting, cable television and DBS); *Inquiry Concerning High-Speed Access to the Internet Over Cable and Other Facilities, Internet Over Cable Declaratory Ruling, Appropriate Regulatory Treatment for Broadband Access to the Internet Over Cable Facilities*, Declaratory Ruling and Notice of Proposed Rulemaking, 17 FCC Rcd 4798, ¶ 6 (2002) ("[R]esidential high-speed access to the Internet is evolving over multiple electronic platforms, including wireline, cable, terrestrial wireless and satellite."); *In The Matter Of Appropriate Framework For Broadband Access To The Internet Over Wireline Facilities*, Notice of Proposed Rulemaking, 17 FCC Rcd. 3019, ¶ 37 (2002) ("[T]he technological evolution ... enabled cable, wireless and satellite providers to begin to compete with the telephone network. In the broadband arena, the competition between cable and telephone companies is particularly pronounced....").

⁷⁰⁵ *Applications for Consent to the Transfer of Control of Licenses and Section 214 Authorizations from Southern New England Telecommunications Corporation, Transferor*, Memorandum Opinion and Order, 13 FCC Rcd 21292, 21305 ¶ 26 (1998).

⁷⁰⁶ Order at ¶ 28 (citing *Policy Regarding Character Qualifications In Broadcast Licensing Amendment of Rules of Broadcast Practice and Procedure Relating to Written Responses to Commission Inquiries and the Making of Misrepresentations to the Commission by Permittees and Licensees*, Report, Order and Policy Statement, 102 FCC 2d 1208-9 (1986)).

⁷⁰⁷ See Statement of Commissioner Kevin J. Martin and Commissioner Michael J. Copps Re: National Association of Broadcasters and Association of Local Television Stations Request for Modification or Clarification of Broadcast Carriage Rules for Satellite Carriers, Declaratory Ruling and Order, CSR-5865-Z (Media Bureau, April 4, 2002), April 10, 2002.

places on consumers and the impact this discrimination may have on some broadcasters—particularly public broadcasters.

I believe EchoStar's ongoing violation of its must-carry obligations is critical to our evaluation of the pending merger. As a preliminary matter, compliance with statutory and regulatory must-carry obligations is central to the provision of DBS service to consumers. It is therefore not surprising that several parties have cited this violation as a reason to deny or condition the merger.⁷⁰⁸ Moreover, as the Order acknowledges, this violation "lies at the heart of the realization of the proffered public interest benefits claimed to flow from the merger – provision of additional local-into-local service pursuant to the must-carry rules."⁷⁰⁹ EchoStar's violation of those rules is therefore both merger-specific and indicative of the applicant's future behavior.

Accordingly, I believe EchoStar's compliance with its must-carry obligations should be included in the issues designated for hearing before an ALJ. I therefore dissent in part, on the majority's decision not to include this issue among those designated for hearing.

* * *

In conclusion, I agree with my colleagues that the record does not support a determination that the merger of EchoStar and DirecTV is in public interest. I note that the Order provides the companies 30 days to amend their application to include major revisions designed to address the anti-competitive impact of their proposed merger. For example, some parties have suggested that the applicants could divest some of their spectrum in a manner that would enable a *new* DBS provider with more efficient technology to compete nationally against a merged EchoStar/DirecTV. These two new DBS providers, it is argued, could provide all consumers with their local broadcast stations and thus serve as stronger competitors to cable than EchoStar and DirecTV do today. This idea is interesting, but the applicants have made no such proposal. If the applicants were to request such a structural remedy, it could merit further review as to its technical and economic feasibility. Failing to fully explore such options could be a missed opportunity to bring more competitive choices to consumers.

⁷⁰⁸ See, e.g. Comments of the Association of Public Television Stations and the Public Broadcasting Service, Feb. 4, 2002, at 5-10. See also Order at note 130 (briefly describing the filings of seven parties who raised this issue).

⁷⁰⁹ Order at ¶ 35.